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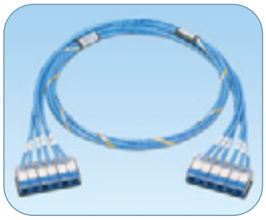
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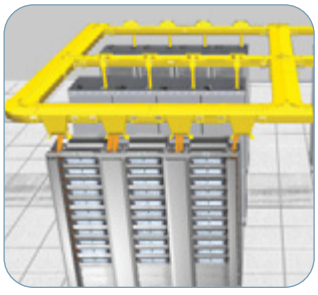
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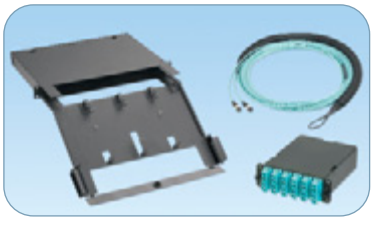
System Overview

PANDUIT is the global leader in end-to-end networking solutions. Complete solutions are available from the work area to the telecommunications room including copper and fiber cabling systems, outlets, raceway, zone cabling, wireless, overhead routing, cabinets and racks, grounding and bonding, managed system solutions, network identification and network accessories. *PANDUIT* solutions ensure seamless integration and system interoperability. The following features are the foundation of the *PANDUIT* solution:











- **End-to-end networking systems**
- **World-class quality**
- **Innovative products**
- **Technology leadership**
- **Unmatched global sales and technical support**

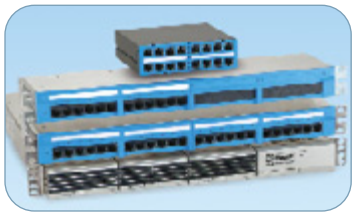
PANDUIT solutions are developed through continued focus on the needs of the customer and a high level of investment in leading edge product development. Best-in-class testing, analysis, and prototyping equipment using the most advanced technologies ensure quick resolution of the most complex challenges. Customers can experience the innovative solutions first hand at one of the regional *PANDUIT* Executive Briefing Centers. These state-of-the-art facilities demonstrate deployment and operation of best-in-class solutions in functional, real-world environments. The investment *PANDUIT* makes in its solutions and services demonstrates long-term commitment to industry leadership, technology excellence, and global learning initiatives. As a result, customers can leverage innovative *PANDUIT* solutions to deploy business applications, realize lower total cost of ownership, and achieve their overall strategic objectives.

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SOLUTIONS THAT ENABLE THE DEPLOYMENT OF TECHNOLOGY

As a global leader in solutions to support demanding electrical and networking requirements, *PANDUIT* is continually focused on market needs. Significant investment in research and development enables *PANDUIT* to provide innovative products that meet the application and environmental requirements of today and tomorrow. This provides leading-edge solutions that allow businesses to move forward with their strategic objectives. The following examples represent *PANDUIT* involvement in emerging technologies and commitment to quality solutions.

POWER OVER ETHERNET (POE)



Since the introduction of the IEEE 802.3af Power over Ethernet (PoE) standard in 2003, devices such as Voice over IP (VoIP) telephones, wireless access points, IP security cameras and building automation systems are realizing the benefits of delivering DC power over standard Category 5e or 6 cabling. Because these devices are often deployed in locations where an available power source is not readily accessible or may be cost prohibitive, supplying managed power through the data cabling is an attractive and cost saving alternative.

The 1 RU designs of the *DPoE*™ Power Patch Panels save valuable rack space in both telecommunications rooms and data centers, and thereby allow for PoE deployment in space-constrained locations. The new *DPoE*™ Compact 8 Midspan provides a flexible solution for smaller installations. The innovative DC power based design is capable of supplying IEEE 802.3af-2003 compliant and Legacy PoE Power to all 8, 12, or 24 ports. In the event of a power disruption, the port prioritization capabilities work with a network management solution to ensure that critical applications remain online and available for use, while other non-critical devices are turned off to conserve power.

In addition, *PANDUIT* is actively participating in the IEEE work group and in the TIA and ISO groups that are driving IEEE802.3at, commonly referred to as PoE Plus, to ensure that *DPoE*™ Systems support the PoE Plus standard for 2X power when it becomes ratified.

DPoE™ Power over Ethernet Systems are also provided with the *DPoE*™ Element Manager, a software application that offers optional local and remote manageability of PoE devices and ports. Alerts can be generated on serious conditions, such as loss of power to key devices or from inadvertent disconnections. With the ability to provide location information on all ports and the panel itself, an IT manager can respond to and resolve concerns efficiently and effectively.

PHYSICAL LAYER MANAGEMENT



As the number of enterprise network devices continue to increase, patch fields in Telecommunications Rooms and Data Centers are becoming more crowded and complicated, making proper documentation and management of these patch fields a necessity. A single patch cord disconnection can bring down critical segments of a network, allow a potential breach in network security, or severely impact the efficiency of the network performance. Without an active intelligent physical layer management system to monitor all connectivity, these patch fields are virtually invisible to a traditional network management system.

The *PANDUIT*® *PanView*™ System provides intelligent physical layer management through real-time monitoring of physical layer connectivity, 24 hours a day, 7 days a week. Using *PanView*™ System Hardware components placed in the network, combined with *PanView*™ Management Software, patch field connections are continuously monitored, fully and accurately documented, and automatically updated. Any inadvertent change is immediately detected and alerted through the management platform. The *PanView*™ System can even guide technicians through costly moves, adds, and changes, providing network systems higher reliability, improved security, better efficiency and greater savings.

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10 GIGABIT ETHERNET OVER COPPER



The bandwidth trends in today's networks suggest the steady migration of workstation data rate speeds from 100 Mb/s (100BASE-T) towards 1,000 Mb/s (1000BASE-T). Furthermore, there is an increased utilization of data centers in LAN environments to improve efficiencies of computer devices (servers, switches, routers) and data storage within networks. As high-speed data rates from workstations are aggregated at data center computer devices, IEEE has recognized the need for a new low cost 10 Gb/s Ethernet copper cabling solution.

The *PANDUIT® TX6™ 10GIG™* UTP and Shielded Copper Cabling System is a complete solution, not just a new cable. Each component features innovative complementary design technologies working together to suppress alien NEXT, while delivering Class EA/Augmented Category 6 electrical performance beyond 500 MHz. The *PANDUIT® TX6™ 10GIG™* UTP and Shielded Copper Cabling System provides end-users with a cost effective media to meet the demanding network requirements of today and tomorrow.

This progression in technology for Ethernet network communications will provide users with a reliable, cost effective, and straight forward method for addressing the most demanding bandwidth needs of their LAN. Primary users for this new technology will include high-end data centers, workstations, and web-enabling applications.

10 GIGABIT ETHERNET OVER FIBER



The need for low cost, high bandwidth Enterprise networks has led to the development of a new class of multimode fibers (ISO designated as OM3 fibers). These fibers enable cost-effective structured cabling solutions by employing low-cost, VCSEL-based transceivers. These systems are designed to deliver 10 Gb/s at a reach of up to 300m using Ethernet protocol.

Because of the availability of low-cost 10 Gb/s transmitter technology, OM3 fiber media and connectivity systems present a less expensive solution than laser-based channels with singlemode fiber. It follows then, that the most economical upgrade paths are those that exploit these solutions wherever practical.

Selection of multimode fiber cabling solutions require that data integrity, manageability, and security be balanced with reasonable cost expectations and future growth requirements (scalability). For 10 Gb/s systems, *PANDUIT* recommends the selection of standards-compliant structured cabling to accommodate near-term and anticipated speed requirements.

PANDUIT has developed a comprehensive suite of *10GIG™* Fiber Cabling products that push beyond the standards using *BEYOND THE GLASS™* Design Excellence. *PANDUIT* fiber research, product development, and manufacturing expertise assure consistent high performance and reliability throughout the structured cabling system.

PANDUIT focuses on functional Bit Error Rate (BER) testing as the true determination of 10 Gb/s channel performance, and considers BER testing as the evaluation method most relevant to the reliable operation of 10 Gigabit networks.

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WIRELESS SOLUTIONS



The use of radio frequency technology to transmit and receive data has been heavily influenced in the past several years by the creation of the IEEE 802.11 set of standards. These standards in turn have contributed to the tremendous growth in the use of WLANs (wireless local area networks) to deliver freedom and mobility to users accessing Ethernet networks. This freedom increases worker productivity and reduces costs. Integrated wired and wireless networks have become essential elements of successful enterprise environments, and are rapidly becoming necessities throughout college campuses, hospitals, convention centers, hotels and ancillary facilities.

In response, *PANDUIT* with Cisco Systems delivers the *WIRELESS CONNECTION*™ Solution. This solution cost-effectively addresses network deployment, security, management and control issues by bringing together wired and wireless networks to enable application interoperability. An integrated network reduces the complexities associated with operating and maintaining active and passive hardware, software, and cabling across multiple environments.

The 802.11i compliant Cisco Systems^ Integrated Wireless Network includes two secure enterprise-class WLAN Solutions: the Cisco Systems^ Autonomous (Distributed) WLAN Solution and the Cisco Systems^ Light-Weight (Centralized) WLAN Solution. Both solutions address the WLAN security, deployment, management and control issues and are supported by Cisco Systems via a smooth migration plan that includes a wide variety of Wireless Access Points, WLAN Controllers, antennas and accessories.

Complementing the Cisco Systems^ Integrated Wireless Network is the *PANDUIT* cabling infrastructure solution. Designed specifically to support a secure wired and wireless environment, *PANDUIT* copper and fiber cabling and connectivity systems, wireless access point enclosures and Power over Ethernet patch panels provide a reliable platform to ensure the most robust and secure enterprise LAN possible.

The *WIRELESS CONNECTION*™ Solution delivers proven interoperability that helps ensure reliability and performance throughout the enterprise LAN. End-users deploying an integrated wired and wireless network are able to maximize their network investment by extending their network applications throughout the enterprise in a reliable and cost effective manner.

^Cisco Systems is a registered trademark of Cisco Technology, Inc.

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CONNECTED BUILDING TECHNOLOGY

IT and Building Automation Systems are converging at a fast pace. A key element enabling this convergence is in the building's Ethernet cabling infrastructure. The result of this convergence is the concept of the Connected Building, which utilizes Ethernet/IP standards compliant cabling to bring the different building systems' communication networks (HVAC, Access Control, Lighting, Fire/Life/Safety) together as an extension of the existing IT infrastructure. An Ethernet cabling infrastructure is a robust, cost effective, and standards driven platform that allows for the design and construction of more flexible and maintainable building automation installations.



There are several advantages to utilizing a structured cabling configuration. First, from a technical perspective, designers can deploy Power over Ethernet (PoE) technology that enables end point devices (ie. IP phones, surveillance cameras, etc.) to draw power from the Ethernet cable supplying network connectivity, increasing the flexibility to extend management capabilities throughout the facility. From a total cost of ownership perspective, on a converged cabling infrastructure, *PANDUIT* solutions minimize the installation of the disparate network wiring required by other building systems, reducing the installation and maintenance cost associated with these separate systems. By integrating on the common IP infrastructure, management of these systems can take place over the network, or remotely if desired.

PANDUIT offers a range of solutions that can integrate the core cabling infrastructure with the building systems via PoE and wireless networking through a zone cabling deployment minimizing implementation costs and dramatically decreasing the cost of future moves, adds, and changes.

GROUNDING FOR DATA CENTER RELIABILITY

The grounding system is not just an insurance policy against a lightning strike. It is an active, functioning system that is crucial to provide protection for equipment and personnel. Proper grounding is essential for efficient network system performance. Improper grounding can result in failures such as lower data transmission rates, unacceptable downtime, damaging expensive equipment and voiding equipment warranties.



Data center grounding is governed by documents TIA-942, J-STD-607-A, and IEEE Std 1100™ (IEEE Emerald Book). According to these standards, a properly designed grounding system is one that is intentional, visually verifiable, adequately sized to handle expected currents safely and one that directs these potentially damaging currents away from sensitive communication equipment.

PANDUIT offers end-to-end solutions to meet customer needs and today's critical application requirements for grounding data centers. *PANDUIT*® *STRUCTUREDGROUND*™ System for Data Center Grounding provides a high quality, visually verifiable, and dedicated grounding path to maintain system performance, improve network reliability, and protect network equipment and personnel. Highest reliability is ensured; this grounding system meets all applicable grounding and bonding industry standards. *PANDUIT*® *STRUCTUREDGROUND*™ System for Data Center Grounding gives you what you need to properly protect your investment.



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ULTIMATE ID® NETWORK LABELING SYSTEM

Permanent labeling is critical for all network cabling system installations. The TIA/EIA-606-A standard has created a unified system that specifies a "common" method of labeling the complete telecommunication infrastructure. The *ULTIMATE ID®* Network Labeling System will support your standards compliant installation with a wide selection of *MINI-COM®* products. *PANDUIT® ULTIMATE ID®* products provide a clean and efficient way to label according to the TIA/EIA-606-A standard. The *ULTIMATE ID®* System will save time and money since the system standardizes on a common label height across all *ULTIMATE ID®* products.
The fewer the components, the lower the cost of the system. The faceplates, surface mount boxes, and patch panels are modular and accept all *MINI-COM®* modules for multimedia applications. All products are designed to hold printed labels and are supplied with flush label covers and mounting screws, where applicable.



- **All labels are protected by a transparent plastic cover**
- **All labels are positioned adjacent to, centered, and parallel to the port they are identifying**
- **All labels have the same compact height to enhance the appearance of the installation**
- **All labels are made of a durable, multi-layered, non-adhesive construction that makes installation and removal quick and easy**
- **The label cover surface is flush with the adjacent faceplate surface**

To maximize legibility, the TIA/EIA-606-A standard states that all labels shall be printed or generated by a "mechanical" device. *ULTIMATE ID®* Labeling Solutions are available for a variety of printers, including desktop, as well as the *PANDUIT® PANTHER™* LS8E Hand-Held Thermal Transfer Printer. The *PANTHER™* LS8E Printer makes compliant labeling fast and easy. Built-in programming lets you line up your legends on patch panel and faceplate labels without guessing how many spaces are needed, which makes the *PANTHER™* LS8E Printer the best solution for on-site network connectivity labeling. *ULTIMATE ID®* Labeling Software for WINDOWS^ is designed for fast and easy creation of labels for *ULTIMATE ID®* Network System patch panels, faceplates, surface mount boxes and marker ties. *ULTIMATE ID®* Labeling Software for WINDOWS^ offers an on-line help function file that includes the TIA/EIA-606-A Labeling Compliance Brochure, SA-IDCB40 which assists with complying to the TIA/EIA-606-A standard labeling requirements.

^WINDOWS is a registered trademark of Microsoft Corporation in the United States and/or other countries.

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Visit the *PANDUIT* website for the latest tools including

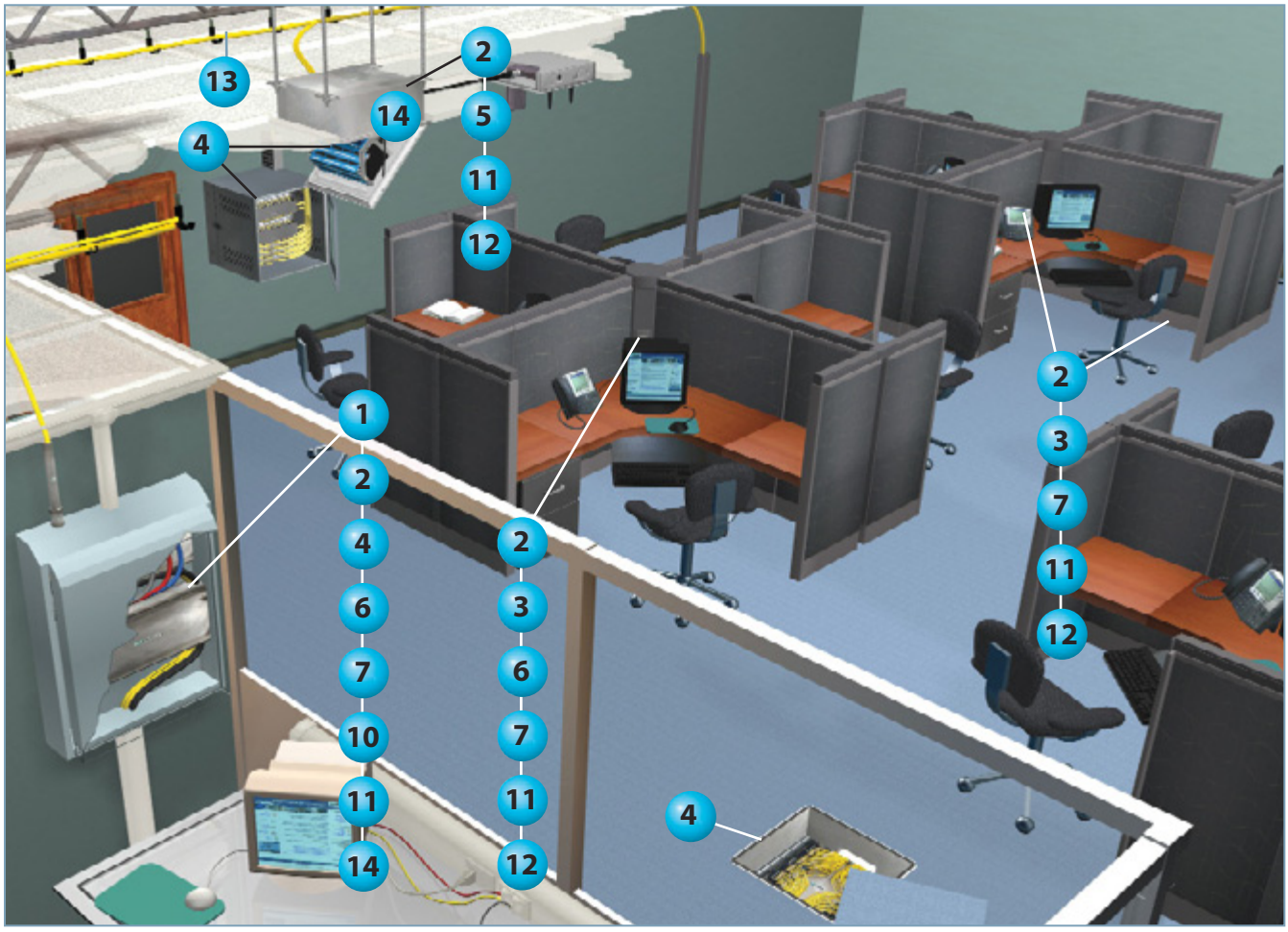


- **Online catalog**
  - Real-time information
  - Product attribute search
  - Create and submit a Bill of Materials for projects
- **Distributor locator**
  - Easily locate a distributor near you
- **FAQs**
  - An extensive, up-to-date database of Frequently Asked Questions on a variety of topics and products
- **Product information**
  - Spec sheets
  - Product bulletins
  - Installation instructions
  - Part drawings
  - Roadmaps
  - Configuration tools
  - White papers
  - Software downloads
- **Case studies**
- **Product training courses**
- **The latest information regarding *PANDUIT* products, programs, and events**

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System Roadmap



Workstation Area

1 **Cable Ties and Accessories (pages F3.1 – F3.49)**

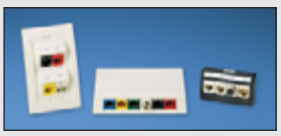


2 **Modules (pages B2.19 – B2.19)**

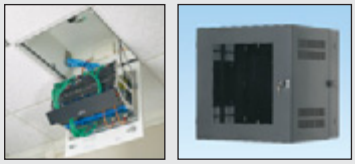


3 **Work Area Outlet Solutions (pages B3.1– B3.29)**

ULTIMATE ID



4 **Zone Cabling (pages B5.1 – B5.10)**



5 **Wireless Solutions (pages B6.1 – B6.8)**



6 **Surface Raceway (pages B4.1 – B4.102)**

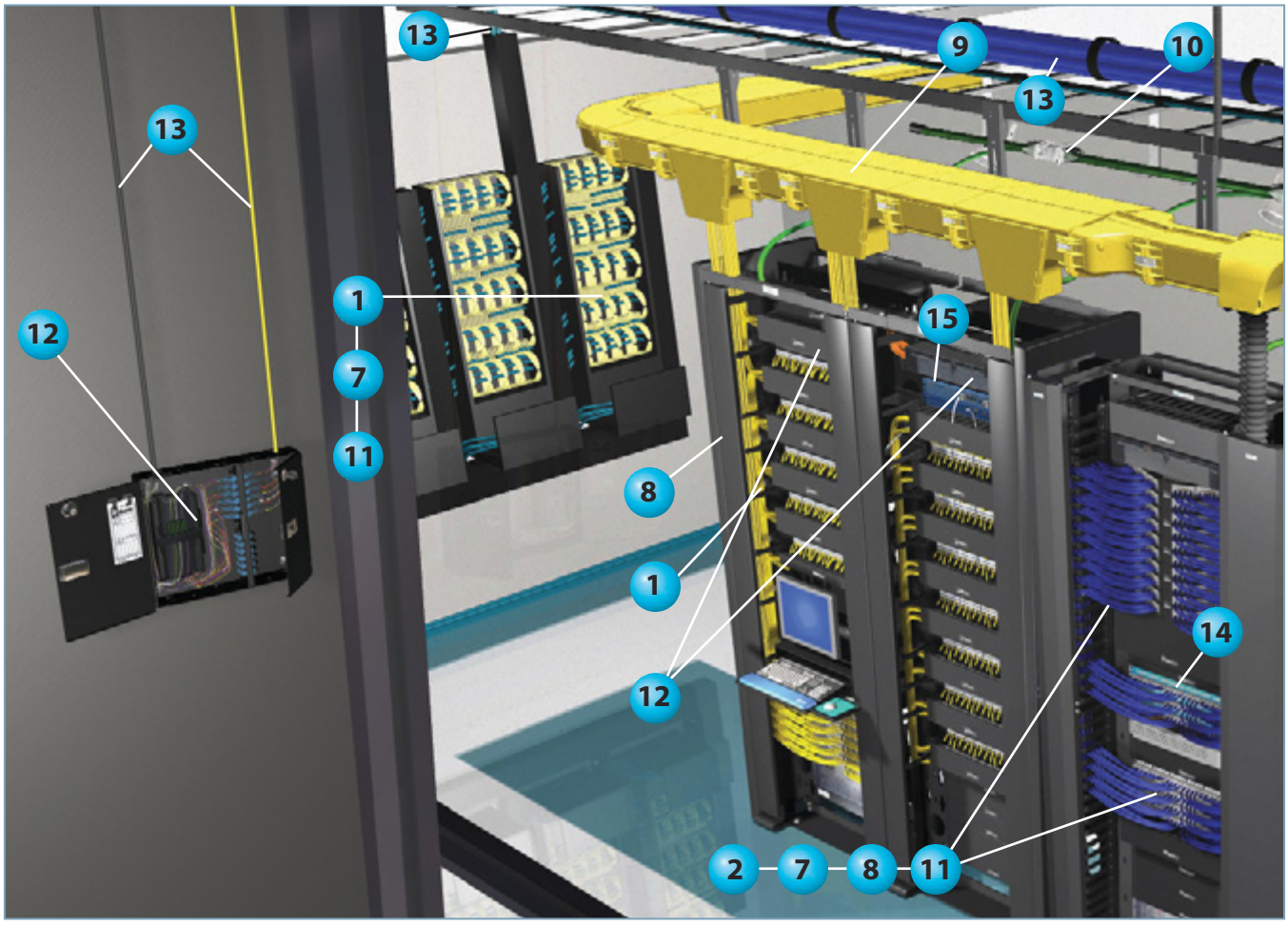


7 **Labeling and Administration (pages F1.1 – F1.8)**

ULTIMATE ID

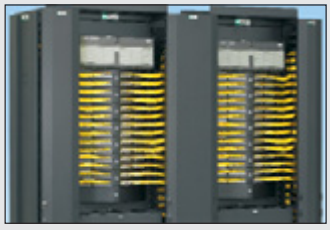


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Telecommunications Room

8 Cabinets, Racks, and Cable Management (pages C4.1 – C4.38)



9 Overhead Routing Systems (pages C3.1 – C3.58)



10 Grounding and Bonding (pages C5.1 – C5.48)





11 Copper Patch Panels, Cords, and Punchdowns (pages C1.1 – C1.45)

ULTIMATE ID



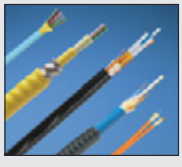
12 Fiber Connectors, Enclosures, and Patch Cords (pages C2.1 – C2.55)



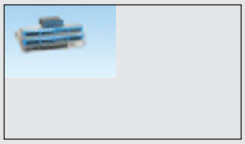


13 Cable (pages B1.1 – B1.20)





14 Power over Ethernet (pages D1.6 – D1.8)



15 Physical Layer Management (pages D1.3 – D1.5)



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TX Copper Cabling Systems Selection Guide

PANDUIT offers end-to-end cabling system solutions for copper and fiber cabling applications. *PANDUIT* cabling systems provide a complete, high performance, reliable, synergized structured cabling infrastructure to optimize your network performance while providing one point of contact.

	***PANDUIT*® *TX6*™ *10G*IG™ Systems**	***PANDUIT*® *TX6500*™ Systems**	***PANDUIT*® *TX6000*™ Systems**	***PANDUIT*® *TX5500*™ Systems**
Standards	• TIA/EIA-568-B.2-AD10 draft • ISO 11801 Class E_A Edition 2.1 draft • IEEE Std. 802.3an	• TIA/EIA-568-B.2-1 Category 6 • ISO 11801 Class E • TSB-155 up to 37m channel	• TIA/EIA-568-B.2-1 Category 6 • ISO 11801 Class E • TSB-155 up to 37m channel	• TIA/EIA-568-B.2-1 Category 5e • ISO 11801 Class D
Performance (Bandwidth)	>500 MHz	>350 MHz	>300 MHz	>175 MHz
Applications	• Ethernet 10GBASE-T • Data center applications for switch-to-switch links, storage area networks, computer cluster farms, storage on demand, and aggregation of data • Vital business management applications, scientific modeling, work group file transfer and media rendering • Web-enabling applications such as Voice over Internet Protocol (VoIP) and live video/audio broadcasting	• Ethernet 10BASE-T, 100BASE-T (Fast Ethernet), 1000BASE-T (Gigabit Ethernet), 10000BASE-T (10 Gigabit Ethernet over limited distances as specified in the industry 10GBASE-T standards) • 155 Mb/s ATM, 622 Mb/s ATM, 1.2 Gb/s ATM • Token Ring 4/16 • Digital video and broadband/baseband analog video • Large data transfers and multimedia transmissions	• Ethernet 10BASE-T, 100BASE-T (Fast Ethernet), 1000BASE-T (Gigabit Ethernet), 10000BASE-T (10 Gigabit Ethernet over limited distances as specified in the industry 10GBASE-T standards) • 155 Mb/s ATM, 622 Mb/s ATM, 1.2 Gb/s ATM • Token Ring 4/16 • Digital video and broadband/baseband analog video • Large data transfers and multimedia transmissions	• Ethernet 10BASE-T, 100BASE-T (Fast Ethernet), 1000BASE-T (Gigabit Ethernet), • 155 Mb/s ATM, 622 Mb/s ATM, 1.2 Gb/s ATM • Token Ring 4/16 • Voice/data systems • Voice over Internet Protocol (VoIP)
Cable	*TX6*™ *10G*IG™ Cable (pgs. B1.2 – B1.3)	*TX6500*™ Enhanced Category 6 UTP Cable (pg. B1.4)	*TX6000*™ Category 6 UTP Cable (pg. B1.5)	*TX5500*™ Category 5e UTP Cable (pg. B1.6)
Jack Modules	*Mini-Com*® *TX6*™ *10G*IG™ Jack Modules (pgs. B2.2 – B2.3)	*Mini-Com*® *TX6*™ *PLUS* Jack Modules (pgs. B2.4 – B2.5)	*Mini-Com*® *TX6*™ *PLUS* Jack Modules (pgs. B2.4 – B2.5)	*Mini-Com*® *TX5e*™ Jack Module (pg. B2.6)
Patch Panels	*DP6*™ *10G*IG™ Patch Panels (pg. C1.16)	*DP6*™ *PLUS* Patch Panels (pg. C1.17)	*DP6*™ *PLUS* Patch Panels (pg. C1.17)	*DP5e*™ *PLUS* Patch Panels (pg. C1.18)
Patch Cords	*TX6*™ *10G*IG™ Patch Cords (pgs. C1.25 – C1.26)	*TX6*™ *PLUS* Patch Cords (pg. C1.27)	*TX6*™ *PLUS* Patch Cords (pg. C1.27)	*TX5e*™ Patch Cords (pg. C1.28)
Punchdown System	—	*GP6*™ Punchdown System* (pgs. C1.33 – C1.37)	*GP6*™ Punchdown System* (pgs. C1.33 – C1.37)	*Pan-Punch*® 110 Category 5e Punchdown System (pgs. C1.38 – C1.45)
Pre-Terminated Connectivity	*QuickNet*™ Copper Cabling System (pgs.C1.4 – C1.6)	*QuickNet*™ Copper Cabling System (pgs. C1.4 – C1.6)	*QuickNet*™ Copper Cabling System (pgs. C1.4 – C1.6)	—

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Fiber Optic Cabling Systems Selection Guide

	PANDUIT **OM3 *10GIG*™ 50µm Multimode Systems**	***PANDUIT*** **OM2 50µm Multimode Systems**	***PANDUIT*** **OM1 62.5µm Multimode Systems**	***PANDUIT*** **OS1 9µm Singlemode Systems**
Standards	• IEEE 802.3ae for 10 Gigabit Ethernet (10 GbE) • IEEE 802.3z for 1 Gigabit Ethernet (1 GbE) • 1, 2, 4 and 10 Gigabit Fibre Channel, (FC-x00-M5-N-I, and 10GFC 1200); x = 1, 2, 4 • SONET OC-192/SDH STM-64, (OIF VSR4-04)	• IEEE 802.3ae for 10 Gigabit Ethernet (10 GbE) • IEEE 802.3z for 1 Gigabit Ethernet (1 GbE) • IEEE 10BASE-F and IEEE 100BASE-FX (10 and 100 Megabit Ethernet) • 2.5 Gb/s InfiniBand (IB-1X-SX)	• IEEE 802.3ae for 1 Gigabit Ethernet (1 GbE) • IEEE 10BASE-F and IEEE 100BASE-FX (10 and 100 Megabit Ethernet)	• IEEE 802.3ae (10GBASE-LX4 – CWDM) • IEEE 802.3ae (1GBASE-LX – 1310nm) • IEEE 802.3ae (10GBASE-EX – 1550nm) • IEEE 802.3ae (10GBASE-LX – 1310nm) • SONET OC-192
Performance (EMB Bandwidth)	• >2000 MHz.km (standard reach fiber) • >4700 MHz.km (extended reach fiber)	• >510 MHz.km (standard reach fiber) • >950 MHz.km (extended reach fiber)	• >220 MHz.km	N/A
Reach (@850nm)	• OM3 (standard reach fiber) up to 300m (10GBASE-SX); up to 1000m (1GBASE-SX) • OM3 (extended reach fiber) up to 550m (10GBASE-SX); up to 1040m (1GBASE-SX)	• OM2 (standard reach fiber) up to 82m (10GBASE-SX); up to 600m (1GBASE-SX) • OM2 (extended reach fiber) up to 150m (10GBASE-SX); up to 750m (1GBASE-SX)	• Up to 26m (10GBASE-SX) • Up to 300m (1GBASE-SX)	• Up to 5km (1GBASE-SX) • Up to 10km (10GBASE-SX) • Up to 40km (10GBASE-EX) • Up to 80km (SONET) OC-192
Applications	• Data centers (switch-to-switch horizontal links) and storage area networks • Financial and medical applications; data warehousing • High performance computing – scientific modeling, simulation and Bioninformatics	• Building backbones and zone cabling • Fiber to the enclosure – delivery of high bandwidth to workgroup applications • Fiber to the desk – digital content creation and video file transaction	• Legacy building backbones and zone cabling • Fiber to the enclosure – delivery of high bandwidth to workgroup applications • Fiber to the desk – digital content creation and video file transaction	• Campus and building backbones • Entrance facilities and equipment rooms • Carrier equipment applications • "Dark fiber" enterprise applications
Cable	*OPTI-CORE® 10GIG*™ OM3 Fiber Optic Cable (pgs. B1.7 – B1.20)	*OPTI-CORE®* OM2 Fiber Optic Cable (pgs. B1.7 – B1.20)	*OPTI-CORE®* OM1 Fiber Optic Cable (pgs. B1.7 – B1.20)	*OPTI-CORE®* OS1 Fiber Optic Cable (pgs. B1.7 – B1.20)
Adapter Modules	*MINI-COM® 10GIG*™ LC, SC, and MPO/MTP* Multimode Adapter Modules (pgs. B2.14 – B2.18)	*MINI-COM®* LC, SC, ST, MT-RJ and MPO/MTP* Multimode Adapter Modules (pgs. B2.14 – B2.18)	*MINI-COM®* LC, SC, ST, MT-RJ and MPO/MTP* Multimode Adapter Modules (pgs. B2.14 – B2.18)	*MINI-COM®* LC, SC, ST, FC and MPO/MTP* Singlemode Adapter Modules (pgs. B2.14 – B2.18)
Fiber Optic Connectors	*PANDUIT* LC and SC Multimode Connectors (pgs. C2.4 – C2.13)	*PANDUIT* LC, SC, ST and FJ® Multimode Connectors (pgs. C2.4 – C2.17)	*PANDUIT* LC, SC, ST and FJ® Multimode Connectors (pgs. C2.4 – C2.17)	*PANDUIT* LC, SC, ST and FJ® Singlemode Connectors (pgs. C2.4 – C2.17)
Fiber Adapter Panels (FAPs)	*OPTICOM®* MPO/MTP*, LC and SC *10GIG*™ Multimode Fiber Adapter Panels (pgs. C2.31 – C2.32)	*OPTICOM®* MPO/MTP*, LC, SC, ST and MT-RJ Multimode Fiber Adapter Panels (pgs. C2.31 – C2.32)	*OPTICOM®* MPO/MTP*, LC, SC, ST and MT-RJ Multimode Fiber Adapter Panels (pgs. C2.31 – C2.32)	*OPTICOM®* MPO/MTP*, LC, SC, ST and FC Singlemode Fiber Adapter Panels (pgs. C2.31 – C2.32)
Pre-Terminated MTP* Cassettes	*QUICKNET*™ *10GIG*™ OM3 Pre-Terminated MTP* Cassettes (pgs. C2.33 – C2.34)	*QUICKNET*™ 50/125µm OM2 Pre-Terminated MTP* Cassettes (pgs. C2.33 – C2.34)	*QUICKNET*™ 62.5µm OM1 Pre-Terminated MTP* Cassettes (pgs. C2.33 – C2.34)	*QUICKNET*™ 9/125µm OS1 Pre-Terminated MTP* Cassettes (pgs. C2.33 – C2.34)
Interconnect, Trunk, and Hydra Cable Assemblies	*QUICKNET*™ *10GIG*™ OM3 Cable Assemblies (pgs. C2.35 – C2.45)	*QUICKNET*™ OM2 Cable Assemblies (pgs. C2.35 – C2.45)	*QUICKNET*™ OM1 Cable Assemblies (pgs. C2.35 – C2.45)	*QUICKNET*™ OS1 Cable Assemblies (pgs. C2.35 – C2.45)
Enclosures, Trays, and Patch Panels	*OPTICOM®* Rack and Wall Mount Enclosures, Trays, and Patch Panels (pgs. C2.26 – C2.28)	*OPTICOM®* Rack and Wall Mount Enclosures, Trays, and Patch Panels (pgs. C2.26 – C2.28)	*OPTICOM®* Rack and Wall Mount Enclosures, Trays, and Patch Panels (pgs. C2.26 – C2.28)	*OPTICOM®* Rack and Wall Mount Enclosures, Trays, and Patch Panels (pgs. C2.26 – C2.28)
Patch Cords and Pigtails	*OPTI-CORE® 10GIG*™ OM3 LC, SC, and Hybrid Patch Cords and Pigtails (pgs. C2.46 – C2.47)	*OPTI-CORE®* OM2 LC, SC, ST, FJ® and Hybrid Patch Cords and Pigtails (pgs. C2.48 – C2.50)	*OPTI-CORE®* OM1 LC, SC, ST, FJ® and Hybrid Patch Cords and Pigtails (pgs. C2.48 – C2.50)	*OPTI-CORE®* OS1 LC, SC, ST, FJ® and Hybrid Patch Cords and Pigtails (pgs. C2.51 – C2.53)

*MTP is a registered trademark of US Conec Ltd.

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GLOBAL SERVICES AND SUPPORT

PANDUIT maintains a dedicated global sales force of highly qualified industry experts to provide professional, consultative sales guidance. In addition, partnership with *PANDUIT* Certified Installers, Designers, and System Integrators offers assistance from design through implementation and post-sale support. *PANDUIT* also teams with best-in-class partners to deliver interoperable, open architecture solutions. Combined, these partnerships provide the services and support to deliver comprehensive, reliable solutions and reduce the total cost of ownership.

RoHS

RESTRICTION OF HAZARDOUS SUBSTANCES (RoHS)

The European Union (EU) directive on the Restriction of use of certain Hazardous Substances bans the use of six substances in electrical and electronic equipment within the European Economic Community (EEC) since July 1, 2006. The RoHS status of *PANDUIT* products can be determined by accessing www.panduit.com.

PACT™ PROGRAM

PANDUIT Global Alliances is a network of best-in-class experts in specialized areas of technology. *PANDUIT* partners with industry leaders to develop and deliver interoperable end-to-end solutions that streamline deployment of new technologies and provide optimum support for your critical network applications. Together our solutions help reduce costs associated with network installation, maintenance, and administration, substantially lowering total cost of ownership of your entire network.

Our alliances differentiate *PANDUIT* value and create advantages for customers across all markets, including finance, government, healthcare and manufacturing. We align with world-renowned organizations such as Cisco Systems, Hewlett-Packard, APC, IBM, EMC and Fluke Networks to deliver best-in-class solutions.

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PANDUIT CERTIFIED INSTALLER PROGRAM

PANDUIT® CERTIFIED INSTALLER

The *PANDUIT* Certified Installer (PCI) Program was created to ensure that end-to-end *PANDUIT* Cabling Systems are installed properly and 100% tested to verify compliance with TIA/EIA industry standards. In support of these objectives, systems installed by *PANDUIT* Certified Installers are eligible for coverage under *PANDUIT* CERTIFICATION PLUS℠ System Warranty*.

PANDUIT Certified Installers share our belief in providing high quality products and service. They have qualified design professionals (eg. BICSI RCDD) on staff, who understand structured cabling requirements to ensure a proper installation. In addition, theoretical and hands-on training is provided initially upon entrance into the PCI Program and repeated regularly to help *PANDUIT* PCIs provide the best installation service in the industry.

The PCI Program provides high-end design and installation companies with the training and support required to install and maintain leading edge *PANDUIT*® PAN-NET® Solutions. What makes this program unique is the establishment of a global network of consistently trained, qualified organizations to help you quickly and efficiently deploy a network infrastructure you can trust to support your toughest applications.

PANDUIT CERTIFIED DESIGNER PROGRAM

PANDUIT® CERTIFIED DESIGNER

PANDUIT demonstrates our service commitment through our global network of certified design firms, which provides a full range of services. These firms have a proven track record in all areas needed for a comprehensive technology system build – from requirements gathering to commissioning.

PANDUIT Certified Designer (PCD) Trusted Partners are the best known and most practiced firms in the industry. *PANDUIT* has confidence that these select firms have the experience, expertise, and financial capability to meet the project you have at hand.

Only firms that are leading the industry in establishing best practice and policy are considered and evaluated by *PANDUIT* to be certified.

To learn more about the program, or find a PCD in your area, contact PCD@panduit.com.

*To be eligible for the CERTIFICATION PLUS℠ System Warranty, the system must be installed by a *PANDUIT* Certified Installer and be registered by *PANDUIT*. The CERTIFICATION PLUS℠ System Warranty is subject to various terms, conditions, and limitations. Go to www.panduit.com/warranty to review the CERTIFICATION PLUS℠ System Warranty.

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PANDUIT CERTIFIED SYSTEM INTEGRATOR PROGRAM

The *PANDUIT* Certified System Integrator (PCSI) Program is designed to create a network of partners who promote and design *PANDUIT* solutions with other technologies, services, and products. This program gives security to end-users by offering them a single source integrator from the physical to the application layers.

The PCSI program offers valuable training and certifications, presenting the system integrator with the opportunity to differentiate their services from the competition. Through this program, system integrators can increase their scope of service, control of the network, and their value to the end user. This exclusive program is offered by *PANDUIT* to first class system integrators to deliver best-in-class solutions to the end user.

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CABLE

PANDUIT offers copper and fiber optic cable to provide an integrated end-to-end solution for both copper and fiber networks. *PANDUIT*® *TX*™ Copper Cable supports 10/100BASE-T, Fast Ethernet, Gigabit Ethernet and 10GBASE-T applications. *PANDUIT*® *OPTI-CORE*® Fiber Optic Cable supports ATM Fibre Channel, 10/100BASE-F, 1000BASE-FX and 10GBASE-FX applications for entrance facility, equipment room, zone and workstation applications. *PANDUIT* copper and fiber optic cable provide reliable performance for the most demanding high-speed/bandwidth driven voice, data, and video network applications.











- ***PANDUIT*** **copper and fiber optic cable are designed to be installed with *PANDUIT* connectivity products (jack modules, connectors, adapter panels, pre-terminated cassettes, patch panels and patch cords) to provide a reliable, modular end-to-end solution**
- ***TX6***™ ***10GIG***™ **Augmented Category 6 UTP and STP Copper Cables feature an innovative design that suppresses powersum alien crosstalk**
- **Copper cable exceeds all applicable TIA/EIA-568-B and ISO 11801 electrical performance requirements**
- **Copper cable is designed with state-of-the-art technology that provides for balanced and enhanced electrical transmissions**
- **Copper cable complies with CMP (NFPA 262 – Plenum) and CMR (UL 1666 – Riser) flammability ratings**
- ***OPTI-CORE***® **Fiber Optic Cable complies with riser (OFNR) and plenum (OFNP) flammability ratings**
- ***OPTI-CORE***® **Fiber Optic Cable exceeds all applicable TIA/EIA-568-B.3 and GR-409 performance requirements**
- ***OPTI-CORE***® ***10GIG***™ **Fiber Optic Cable features the highest quality laser optimized fiber to support 10 Gb/s applications**

The *TX*™ Copper Cabling System includes *TX6*™ *10GIG*™ , *TX6500*™ , *TX6000*™ and *TX5500*™ Cable. The *OPTI-CORE*® Fiber Optic Cabling System consists of Distribution, Indoor Interlocking Armored, Indoor/Outdoor All-Dielectric, Indoor/Outdoor Interlocking Armored, Outside Plant All-Dielectric, Outside Plant Armored and Interconnect Cable in standard non-ribbonized and ribbonized designs in multimode (OM1 – 62.5/125µm, OM2 – 50/125µm, and OM3 – *10GIG*™ 50/125µm) and singlemode (OS1) variations to support and extend the life cycle of your fiber optic infrastructure.

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TX6™ 10GIG™ UTP Cable

- Exceeds draft requirements of TIA/EIA-568-B.2-AD10 and ISO 11801 Class E_A Edition 2.1, and IEEE 802.3an-2006 ratified standard channel requirements for supporting 10GBASE-T
- Conductors are tightly twisted in pairs and all four pairs are placed into a jacket
- Internal separators are used to improve NEXT performance
- Maximum installation tension of 25 lbs. (110 N)
- Installation temperature range: 32°F to 140°F (0°C to 60°C)
- Operating temperature range: 14°F to 140°F (-10°C to 60°C)
- Patent-pending cable design suppresses alien crosstalk with enhanced internal electrical performance
- Cable supplied on a reel in a box
- Descending foot markings on cable to ease installation
- Plenum (CMP) and non-plenum/riser (CMR)
- Third party tested to 650 MHz

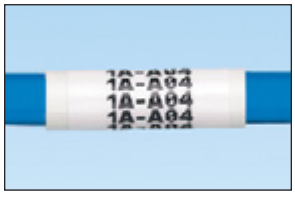


PUP6X04BU-U

Part Number	Part Description	Color‡	Std. Pkg. Qty. (Ft.)	Std. Ctn. Qty. (Ft.)
Riser				
PUR6X04BU-UY	Category 6A riser (CMR) UTP cable. Conductors are 23 AWG construction and protected in a flame-retardant PVC jacket.	Blue	1000	18000
Plenum				
PUP6X04BU-U	Category 6A plenum (CMP) UTP cable. Conductors are 23 AWG construction and protected in a flame-retardant PVC jacket.	Blue	1000	18000

‡For other colors replace BU (Blue) with WH (White), YL (Yellow), or IG (International Gray).
Must be installed as part of a complete TX6™ *10GIG™* Copper Cabling System in order to achieve 10GBASE-T certified performance.

Cable Labels for *TX6™ 10GIG™* UTP Cable



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Cable Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER™* LS8E Hand-Held Printer Label	*COUGAR™* LS9 Hand-Held Printer Label
PUR6X04–UY** **PUP6X04**–U**	**S100X225YAJ**	**S100X225VATY**	**S100X225VAC**	**T100X000CBC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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TX6™ *10GIG*™ Shielded Cable

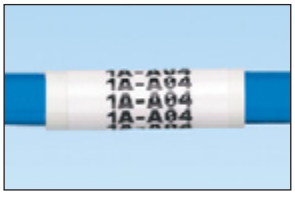
- Exceeds draft requirements of TIA/EIA-568-B.2-AD10 and ISO 11801 Class E_A Edition 2.1, and IEEE 802.3an-2006 ratified standard channel requirements for supporting 10GBASE-T
- Conductors are tightly twisted in pairs and all four pairs are individually wrapped in foil (U/FTP)
- Internal drain wire facilitates grounding
- Maximum installation tension of 25 lbs. (110 N)
- Installation temperature range: 32°F to 140°F (0°C to 60°C)
- Operating temperature range: 14°F to 140°F (-10°C to 60°C)
- Cable supplied on reel
- Descending markings on cable to ease installation
- Plenum (CMP) and non-plenum/riser (CMR)
- Third party tested to 650 MHz



Part Number	Part Description	Color‡	Std. Pkg. Qty (Ft.).	Std. Ctn. Qty. (Ft.)
Riser				
PSR6004BU-UGY	Category 6A riser (CMR) shielded cable. Conductors are 23 AWG construction. Each pair has a metallic foil shield and conductors are protected in a flame-retardant PVC jacket.	Blue	1000	15000
Plenum				
PSP6004BU-UGY	Category 6A plenum (CMP) shielded cable. Conductors are 23 AWG construction. Each pair has a metallic foil shield and conductors are protected in a flame-retardant PVC jacket.	Blue	1000	15000

‡ For other colors replace BU (Blue) with WH (White), YL (Yellow), or IG (International Gray).
Must be installed as part of a complete *TX6*™ *10GIG*™ Copper Cabling System in order to achieve 10GBASE-T certified performance.
In data center and telecommunication room applications, *PANDUIT* recommends that both-ends of shielded cable link be bonded if the channel is contained in the same building and any multiple serving AC power systems are intersystem bonded. For workstation applications, it is recommended that the cable link be bonded through the normal process in the telecommunication room and through the patch cord at the workstation, which provides the proper path to ground via the computer's AC power plug.

Cable Labels for *TX6*™ *10GIG*™ Shielded Cable



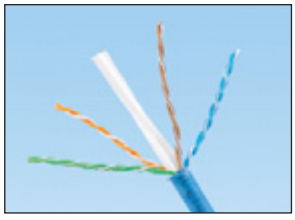
Suggested Label Solutions for TIA/EIA-606-A Compliance				
Cable Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
PSR6004–UGY PSP6004**–UGY**	**S100X225YAJ**	**S100X225VATY**	**S100X225VAC**	**T100X000CBC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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TX6500™ Category 6 UTP Copper Cable

- Enhanced high-performance cable exceeds all TIA/EIA-568-B.2-1 Category 6 and ISO 11801 Edition 2.0 for Class E cable requirements
- ETL tested for Category 6 component performance
- Conductors are twisted in pairs with four pairs contained in a flame retardant PVC jacket separated by a spline
- Performance tested to 650 MHz
- Plenum (CMP) and non-plenum/riser (CMR) flame rated
- Maximum installation tension of 25 lbs. (110 N)
- Installation temperature range: 32°F to 140°F (0°C to 60°C)
- Operating temperature range: 14°F to 140°F (-10°C to 60°C)
- Cable diameter: riser – .260"; plenum – .250"
- Easy payout, reel-in-a-box and descending length markings on cable speed installation
- Supports the following applications: Ethernet 10BASE-T, 100BASE-T (Fast Ethernet), 1000BASE-T (Gigabit Ethernet) and 10GBASE-T; 1.2 Gb/s ATM; Token Ring 4/16
- Third party tested to 650 MHz

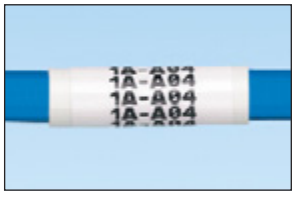


PUR6504BU-UY

Part Number	Part Description	Color‡	Std. Pkg. Qty. (Ft.)	Std. Ctn. Qty. (Ft.)
Riser				
PUR6504BU-UY	Enhanced high-performance Category 6 riser (CMR) cable with separator. Conductors are 23 AWG construction and placed in a flame-retardant PVC jacket.	Blue	1000	27000
Plenum				
PUP6504BU-U	Enhanced high-performance Category 6 plenum (CMP) cable with separator. Conductors are 23 AWG construction and placed in a flame-retardant PVC jacket.	Blue	1000	27000

‡For other colors replace BU (Blue) with WH (White), YL (Yellow), or IG (International Gray).

Cable Labels for *TX6500*™ Category 6 UTP Cable



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Cable Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
PUR6504-UY** **PUP6504**-U**	**S100X150YAJ**	**S100X150VATY**	**S100X150VAC**	**T100X000CBC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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TX6000™ Category 6 UTP Cable

- High-performance cable exceeds all TIA/EIA-568-B.2-1 Category 6 cable performance requirements
- ETL tested to Category 6 component compliance
- Conductors are twisted in pairs with four pairs contained in a flame retardant PVC jacket separated by a divider
- Performance tested to 650 MHz
- Plenum (CMP) and non-plenum/riser (CMR) flame rated
- Maximum installation tension of 25 lbs. (110 N)
- Installation temperature range: 32°F to 140°F (0°C to 60°C)
- Operating temperature range: 14°F to 140°F (-10°C to 60°C)
- Cable diameter: riser – .248"; plenum – .235"
- Easy payout, reel-in-a-box and descending length markings on cable speed installation
- Supports the following applications: Ethernet 10BASE-T, 100BASE-T (Fast Ethernet), 1000BASE-T (Gigabit Ethernet) and 10GBASE-T; 1.2 Gb/s ATM; Token Ring 4/16
- Third party tested to 650 MHz

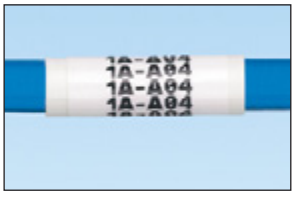


PUR6004BU-UY

Part Number	Part Description	Color‡	Std. Pkg. Qty. (Ft.)	Std. Ctn. Qty. (Ft.)
Riser				
PUR6004BU-UY	High-performance Category 6 riser (CMR) cable with separator. Conductors are 23 AWG construction and placed in a flame-retardant PVC jacket.	Blue	1000	27000
Plenum				
PUP6004BU-UY	High-performance Category 6 plenum (CMP) cable with separator. Conductors are 23 AWG construction and placed in a flame-retardant PVC jacket.	Blue	1000	27000

‡For other colors replace BU (Blue) with WH (White), YL (Yellow), or IG (International Gray).

Cable Labels for *TX6000*™ Category 6 UTP Cable



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Cable Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
PUR6004-UY** **PUP6004**-UY**	**S100X150YAJ**	**S100X150VATY**	**S100X150VAC**	**T100X000CBC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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TX5500™ Category 5e UTP Cable

- Enhanced high-performance cable exceeds all TIA/EIA-568-B.2 Category 5e cable requirements
- ETL tested to Category 5e component compliance
- Conductors are twisted in pairs and placed in a flame retardant PVC jacket
- Plenum (CMP) and non-plenum/riser (CMR) flame rated
- Maximum installation tension of 25 lbs. (110 N)
- Installation temperature range: 32° to 140°F (0°C to 60°C)
- Operating temperature range: 14°F to 140°F (-10°C to 60°C)
- 25-pair non-plenum/riser nominal cable diameter is .49"
- Cable diameter: 4-pair riser – .193"; plenum – .190"
- Easy payout box and descending length markings on cable speed installation
- Supports the following applications: Ethernet 10BASE-T, 100BASE-T (Fast Ethernet), and 1000BASE-T (Gigabit Ethernet); 622 Mb/s ATM; Token Ring 4/16
- Third party tested to 350 MHz

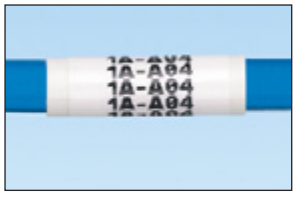


PUR5504BU-UY

Part Number	Part Description	Color‡	Std. Pkg. Qty. (Ft.)	Std. Ctn. Qty. (Ft.)
4-Pair Riser				
PUR5504BU-W	Category 5e riser (CMR) cable. Conductors are 24 AWG construction and placed in a flame-retardant PVC jacket.	Blue	1000	36000
4-Pair Plenum				
PUP5504BU-W	Category 5e plenum (CMP) cable. Conductors are 24 AWG construction and placed in a flame-retardant PVC jacket.	Blue	1000	36000
25-Pair Riser				
PUR5525IG-W	Category 5e 25-pair riser (CMR) cable. Conductors are 24 AWG construction and placed in a flame-retardant PVC jacket.	International Gray	1000	3000
25-Pair Plenum				
PUP5525IG-W	Category 5e 25-pair plenum (CMP) cable. Conductors are 24 AWG construction and placed in a flame-retardant PVC jacket.	International Gray	1000	3000

‡For other colors replace BU (Blue) with WH (White), YL (Yellow), or IG (International Gray).
PUR5525IG-W and PUP5525IG-W only available in (IG) International Gray.
In data center and telecommunication room applications, *PANDUIT* recommends that both-ends of shielded cable link be bonded if the channel is contained in the same building and any multiple serving AC power systems are intersystem bonded. For workstation applications, it is recommended that the cable link be bonded through the normal process in the telecommunication room and through the patch cord at the workstation, which provides the proper path to ground via the computer's AC power plug.

Cable Labels for *TX5500*™ Category 5e UTP Cable



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Cable Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
PUR5504-W PUP5504**-W PUR5525**-W PUP5525**-W**	**S100X150YAJ**	**S100X150VATY**	**S100X150VAC**	**T100X000CBC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

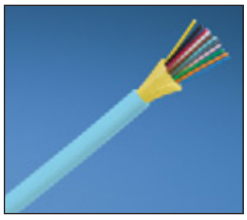
Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

OPTI-CORE® Fiber Optic Distribution Cable

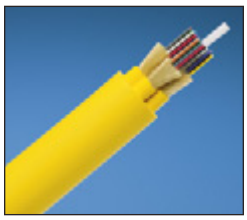
- Used in intrabuilding backbone, building backbone, and horizontal installations for riser (OFNR), plenum (OFNP), and general-purpose environments
- Singlemode (OS1) and multimode (OM1, OM2, and *10GIG*™ OM3 laser optimized) fiber available
- Sheath markings provide positive identification, quality traceability, and length verification
- Cable design and flexible buffer tubes allow for quick breakout and ease of routing
- 900µm standards-based color coded buffer coating protects fibers during handling and allows for easy identification and stripping
- *OPTI-CORE® 10GIG*™ Cable is designed to support network transmission speeds up to 10 Gb/s for link lengths up to 300m with an 850nm source per IEEE 802.3ae 10 GbE Standard; backward compatible for use with all 50/125µm system requirements



FSDR606Y



FODRX12Y



FSDR948Y

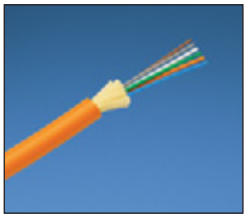
Part Number	Part Description	Color
OPTI-CORE® Riser Distribution Cable (OFNR) – Multimode		
FSDR606Y	6-fiber 62.5/125µm (OM1) multimode riser rated distribution cable.	Orange
FSDR612Y	12-fiber 62.5/125µm (OM1) multimode riser rated distribution cable.	Orange
FSDR624Y	24-fiber 62.5/125µm (OM1) multimode riser rated distribution cable.	Orange
FSDR636Y	36-fiber 62.5/125µm (OM1) multimode riser rated distribution cable; six subunits of six fibers each.	Orange
FSDR648Y	48-fiber 62.5/125µm (OM1) multimode riser rated distribution cable; four subunits of twelve fibers each.	Orange
FSDR506Y	6-fiber 50/125µm (OM2) multimode riser rated distribution cable.	Orange
FSDR512Y	12-fiber 50/125µm (OM2) multimode riser rated distribution cable.	Orange
FSDR524Y	24-fiber 50/125µm (OM2) multimode riser rated distribution cable.	Orange
FSDR536Y	36-fiber 50/125µm (OM2) multimode riser rated distribution cable; six subunits of six fibers each.	Orange
FSDR548Y	48-fiber 50/125µm (OM2) multimode riser rated distribution cable; four subunits of twelve fibers each.	Orange
FODRX06Y	6-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated distribution cable.	Aqua
FODRX12Y	12-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated distribution cable.	Aqua
FODRX24Y	24-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated distribution cable.	Aqua
FODRX36Y	36-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated distribution cable; six subunits of six fibers each.	Aqua
FODRX48Y	48-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated distribution cable; four subunits of twelve fibers each.	Aqua
OPTI-CORE® Riser Distribution Cable (OFNR) – Singlemode		
FSDR906Y	6-fiber 9/125µm (OS1) singlemode riser rated distribution cable.	Yellow
FSDR912Y	12-fiber 9/125µm (OS1) singlemode riser rated distribution cable.	Yellow
FSDR924Y	24-fiber 9/125µm (OS1) singlemode riser rated distribution cable.	Yellow
FSDR936Y	36-fiber 9/125µm (OS1) singlemode riser rated distribution cable; six subunits of six fibers each.	Yellow
FSDR948Y	48-fiber 9/125µm (OS1) singlemode riser rated distribution cable; four subunits of twelve fibers each.	Yellow

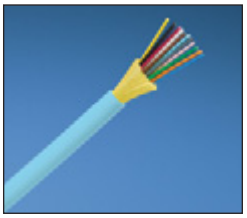
Contact Customer Service for minimum order quantities, availability, and additional product configurations. Options include jacket colors, hybrid constructions (multiple fiber types within a single cable), flame ratings, subunit counts, armoring, premium optical performance grades and ribbonized constructions.

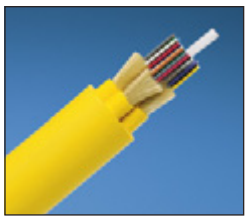
Table continues on page B1.8

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OPTI-CORE® Fiber Optic Distribution Cable (continued)


FSDP606Y


FODPX12Y


FSDP948Y

Part Number	Part Description	Color
OPTI-CORE® Plenum Distribution Cable (OFNP) – Multimode		
FSDP606Y	6-fiber 62.5/125µm (OM1) multimode plenum rated distribution cable.	Orange
FSDP612Y	12-fiber 62.5/125µm (OM1) multimode plenum rated distribution cable.	Orange
FSDP624Y	24-fiber 62.5/125µm (OM1) multimode plenum rated distribution cable.	Orange
FSDP636Y	36-fiber 62.5/125µm (OM1) multimode plenum rated distribution cable; six subunits of six fibers each.	Orange
FSDP648Y	48-fiber 62.5/125µm (OM1) multimode plenum rated distribution cable; four subunits of twelve fibers each.	Orange
FSDP506Y	6-fiber 50/125µm (OM2) multimode plenum rated distribution cable.	Orange
FSDP512Y	12-fiber 50/125µm (OM2) multimode plenum rated distribution cable.	Orange
FSDP524Y	24-fiber 50/125µm (OM2) multimode plenum rated distribution cable.	Orange
FSDP536Y	36-fiber 50/125µm (OM2) multimode plenum rated distribution cable; six subunits of six fibers each.	Orange
FSDP548Y	48-fiber 50/125µm (OM2) multimode plenum rated distribution cable; four subunits of twelve fibers each.	Orange
FODPX06Y	6-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated distribution cable.	Aqua
FODPX12Y	12-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated distribution cable.	Aqua
FODPX24Y	24-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated distribution cable.	Aqua
FODPX36Y	36-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated distribution cable; six subunits of six fibers each.	Aqua
FODPX48Y	48-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated distribution cable; four subunits of twelve fibers each.	Aqua
OPTI-CORE® Plenum Distribution Cable (OFNP) – Singlemode		
FSDP906Y	6-fiber 9/125µm (OS1) singlemode plenum rated distribution cable.	Yellow
FSDP912Y	12-fiber 9/125µm (OS1) singlemode plenum rated distribution cable.	Yellow
FSDP924Y	24-fiber 9/125µm (OS1) singlemode plenum rated distribution cable.	Yellow
FSDP936Y	36-fiber 9/125µm (OS1) singlemode plenum rated distribution cable; six subunits of six fibers each.	Yellow
FSDP948Y	48-fiber 9/125µm (OS1) singlemode plenum rated distribution cable; four subunits of twelve fibers each.	Yellow

Contact Customer Service for minimum order quantities, availability, and additional product configurations. Options include jacket colors, hybrid constructions (multiple fiber types within a single cable), flame ratings, subunit counts, armoring, premium optical performance grades and ribbonized constructions.

Cable Labels for OPTI-CORE® Fiber Optic Distribution Cable



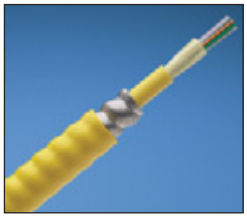
Suggested Label Solutions for TIA/EIA-606-A Compliance				
Fiber Count	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER*™ LS8E Hand-Held Printer Label**	***COUGAR*™ LS9 Hand-Held Printer Label**
6 12	**S100X220YAJ and NWSLC-7Y**	**S100X225VATY and NWSLC-7Y**	**S100X220VAC and NWSLC-7Y**	**T100X000CBC-BK and NWSLC-7Y**
24 36	**S100X400YAJ**	**S100X400VATY**	**S100X400VAC**	**T100X000CBC-BK**
48	**S100X650YAJ**	**S100X650VATY**	**S100X650VAC**	**T100X000CBC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

OPTI-CORE® Fiber Optic Indoor Interlocking Armored Cable

- Used in intrabuilding backbone, building backbone, and horizontal installations for riser (OFCR), plenum (OFCP), and harsh environments
- Interlocking aluminum armor eliminates the need for inner duct or conduit to provide a smaller crush resistant pathway for design flexibility and a lower installed cost
- Singlemode (OS1) and multimode (OM1, OM2, and *10GIG*™ OM3 laser optimized) fiber available
- Sheath markings provide positive identification, quality traceability, and length verification
- 900µm standards-based color coded buffer coating protects fibers during handling and allows for easy identification and stripping
- Cable design and flexible buffer tubes allow for quick breakout and ease of routing
- *OPTI-CORE® 10GIG*™ Cable is designed to support network transmission speeds up to 10 Gb/s for link lengths up to 300m with an 850nm source per IEEE 802.3ae 10 GbE Standard; backward compatible for use with all 50/125µm system requirements



FSPR912Y

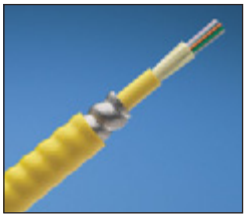
Part Number	Part Description	Color
OPTI-CORE® Riser Indoor Interlocking Armored Cable (OFCR) – Multimode		
FSPR606Y	6-fiber 62.5/125µm (OM1) multimode riser rated indoor interlocking armored cable.	Orange
FSPR612Y	12-fiber 62.5/125µm (OM1) multimode riser rated indoor interlocking armored cable.	Orange
FSPR624Y	24-fiber 62.5/125µm (OM1) multimode riser rated indoor interlocking armored cable.	Orange
FSPR636Y	36-fiber 62.5/125µm (OM1) multimode riser rated indoor interlocking armored cable.	Orange
FSPR648Y	48-fiber 62.5/125µm (OM1) multimode riser rated indoor interlocking armored cable.	Orange
FSPR506Y	6-fiber 50/125µm (OM2) multimode riser rated indoor interlocking armored cable.	Orange
FSPR512Y	12-fiber 50/125µm (OM2) multimode riser rated indoor interlocking armored cable.	Orange
FSPR524Y	24-fiber 50/125µm (OM2) multimode riser rated indoor interlocking armored cable.	Orange
FSPR536Y	36-fiber 50/125µm (OM2) multimode riser rated indoor interlocking armored cable.	Orange
FSPR548Y	48-fiber 50/125µm (OM2) multimode riser rated indoor interlocking armored cable.	Orange
FOPRX06Y	6-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated indoor interlocking armored cable.	Aqua
FOPRX12Y	12-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated indoor interlocking armored cable.	Aqua
FOPRX24Y	24-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated indoor interlocking armored cable.	Aqua
FOPRX36Y	36-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated indoor interlocking armored cable.	Aqua
FOPRX48Y	48-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated indoor interlocking armored cable.	Aqua
OPTI-CORE® Riser Indoor Interlocking Armored Cable (OFCR) – Singlemode		
FSPR906Y	6-fiber 9/125µm (OS1) singlemode riser rated indoor interlocking armored cable.	Yellow
FSPR912Y	12-fiber 9/125µm (OS1) singlemode riser rated indoor interlocking armored cable.	Yellow
FSPR924Y	24-fiber 9/125µm (OS1) singlemode riser rated indoor interlocking armored cable.	Yellow
FSPR936Y	36-fiber 9/125µm (OS1) singlemode riser rated indoor interlocking armored cable.	Yellow
FSPR948Y	48-fiber 9/125µm (OS1) singlemode riser rated indoor interlocking armored cable.	Yellow

Contact Customer Service for minimum order quantities, availability, and additional product configurations. Options include jacket colors, hybrid constructions (multiple fiber types within a single cable), flame ratings, subunit counts, indoor/outdoor designs, premium optical performance grades and ribbonized constructions.

Table continues on page B1.10

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

OPTI-CORE® Fiber Optic Indoor Interlocking Armored Cable (continued)



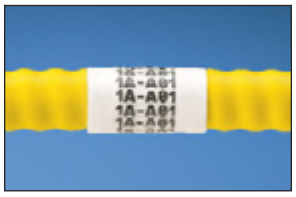
FSPP912Y

Part Number	Part Description	Color
OPTI-CORE® Plenum Indoor Interlocking Armored Cable (OFCP) – Multimode		
FSPP606Y	6-fiber 62.5/125µm (OM1) multimode plenum rated indoor interlocking armored cable.	Orange
FSPP612Y	12-fiber 62.5/125µm (OM1) multimode plenum rated indoor interlocking armored cable.	Orange
FSPP624Y	24-fiber 62.5/125µm (OM1) multimode plenum rated indoor interlocking armored cable.	Orange
FSPP636Y	36-fiber 62.5/125µm (OM1) multimode plenum rated indoor interlocking armored cable.	Orange
FSPP648Y	48-fiber 62.5/125µm (OM1) multimode plenum rated indoor interlocking armored cable.	Orange
FSPP506Y	6-fiber 50/125µm (OM2) multimode plenum rated indoor interlocking armored cable.	Orange
FSPP512Y	12-fiber 50/125µm (OM2) multimode plenum rated indoor interlocking armored cable.	Orange
FSPP524Y	24-fiber 50/125µm (OM2) multimode plenum rated indoor interlocking armored cable.	Orange
FSPP536Y	36-fiber 50/125µm (OM2) multimode plenum rated indoor interlocking armored cable.	Orange
FSPP548Y	48-fiber 50/125µm (OM2) multimode plenum rated indoor interlocking armored cable.	Orange
FOPPX06Y	6-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated indoor interlocking armored cable.	Aqua
FOPPX12Y	12-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated indoor interlocking armored cable.	Aqua
FOPPX24Y	24-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated indoor interlocking armored cable.	Aqua
FOPPX36Y	36-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated indoor interlocking armored cable.	Aqua
FOPPX48Y	48-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated indoor interlocking armored cable.	Aqua
OPTI-CORE® Plenum Indoor Interlocking Armored Cable (OFCP) – Singlemode		
FSPP906Y	6-fiber 9/125µm (OS1) singlemode plenum rated indoor interlocking armored cable.	Yellow
FSPP912Y	12-fiber 9/125µm (OS1) singlemode plenum rated indoor interlocking armored cable.	Yellow
FSPP924Y	24-fiber 9/125µm (OS1) singlemode plenum rated indoor interlocking armored cable.	Yellow
FSPP936Y	36-fiber 9/125µm (OS1) singlemode plenum rated indoor interlocking armored cable.	Yellow
FSPP948Y	48-fiber 9/125µm (OS1) singlemode plenum rated indoor interlocking armored cable.	Yellow

Contact Customer Service for minimum order quantities, availability, and additional product configurations. Options include jacket colors, hybrid constructions (multiple fiber types within a single cable), flame ratings, subunit counts, indoor/outdoor designs, premium optical performance grades and ribbonized constructions.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

Cable Labels for *OPTI-CORE*® Fiber Optic Indoor Interlocking Armored Cable



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Fiber Count	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
6 12 24 36 48	S100X650YAJ	S100X650VATY	S100X650VAC	T100X000CBC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

OPTI-CORE® Fiber Optic Indoor/Outdoor All-Dielectric Cable

- Used within buildings and outdoor environments for transitional aerial and duct applications, and in entrance facilities that require riser (OFNR) or plenum (OFNP) rated cable
- Eliminates the need for building entrance transition point
- All-dielectric cable construction requires no grounding or bonding
- UV resistant cable sheathing meets the light absorption requirement defined by Telcordia GR-20, Issue 2 to withstand harsh outdoor environmental demands
- Dry water-blocking technology allows rapid cable preparation and termination for lower termination costs and time (no messy gel required)
- Singlemode (OS1) and multimode (OM1, OM2, and *10GIG*™ OM3 laser optimized) fiber available
- Sheath markings provide positive identification, quality traceability, and length verification
- 250µm buffer coating protects fibers during handling and allows for ease of stripping
- *OPTI-CORE® 10GIG*™ Cable is designed to support network transmission speeds up to 10 Gb/s for link lengths up to 300m with an 850nm source per IEEE 802.3ae 10 GbE Standard; backward compatible for use with all 50/125µm system requirements



FSCR606Y



FONRX24Y

Part Number	Part Description	Color
OPTI-CORE® Riser Indoor/Outdoor All-Dielectric Cable (OFNR) – Multimode		
FSCR606Y	6-fiber 62.5/125µm (OM1) multimode riser rated indoor/outdoor central cable.	Black
FSCR612Y	12-fiber 62.5/125µm (OM1) multimode riser rated indoor/outdoor central cable.	Black
FSNR624Y	24-fiber 62.5/125µm (OM1) multimode riser rated indoor/outdoor stranded cable.	Black
FSNR636Y	36-fiber 62.5/125µm (OM1) multimode riser rated indoor/outdoor stranded cable.	Black
FSNR648Y	48-fiber 62.5/125µm (OM1) multimode riser rated indoor/outdoor stranded cable.	Black
FSCR506Y	6-fiber 50/125µm (OM2) multimode riser rated indoor/outdoor central cable.	Black
FSCR512Y	12-fiber 50/125µm (OM2) multimode riser rated indoor/outdoor central cable.	Black
FSNR524Y	24-fiber 50/125µm (OM2) multimode riser rated indoor/outdoor stranded cable.	Black
FSNR536Y	36-fiber 50/125µm (OM2) multimode riser rated indoor/outdoor stranded cable.	Black
FSNR548Y	48-fiber 50/125µm (OM2) multimode riser rated indoor/outdoor stranded cable.	Black
FOCRX06Y	6-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated indoor/outdoor central cable.	Black
FOCRX12Y	12-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated indoor/outdoor central cable.	Black
FONRX24Y	24-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated indoor/outdoor stranded cable.	Black
FONRX36Y	36-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated indoor/outdoor stranded cable.	Black
FONRX48Y	48-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated indoor/outdoor stranded cable.	Black
OPTI-CORE® Riser Indoor/Outdoor All-Dielectric Cable (OFNR) – Singlemode		
FSCR906Y	6-fiber 9/125µm (OS1) singlemode riser rated indoor/outdoor central cable.	Black
FSCR912Y	12-fiber 9/125µm (OS1) singlemode riser rated indoor/outdoor central cable.	Black
FSNR924Y	24-fiber 9/125µm (OS1) singlemode riser rated indoor/outdoor stranded cable.	Black
FSNR936Y	36-fiber 9/125µm (OS1) singlemode riser rated indoor/outdoor stranded cable.	Black
FSNR948Y	48-fiber 9/125µm (OS1) singlemode riser rated indoor/outdoor stranded cable.	Black

Contact Customer Service for minimum order quantities, availability, and additional product configurations. Options include jacket colors, hybrid constructions (multiple fiber types within a single cable), flame ratings, subunit counts, armoring, premium optical performance grades and ribbonized constructions.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

OPTI-CORE® Fiber Optic Indoor/Outdoor All-Dielectric Cable (continued)



FSCP606Y



FONPX24Y

Part Number	Part Description	Color
OPTI-CORE® Plenum Indoor/Outdoor All-Dielectric Cable (OFNP) – Multimode		
FSCP606Y	6-fiber 62.5/125µm (OM1) multimode plenum rated indoor/outdoor central cable.	Orange
FSCP612Y	12-fiber 62.5/125µm (OM1) multimode plenum rated indoor/outdoor central cable.	Orange
FSNP624Y	24-fiber 62.5/125µm (OM1) multimode plenum rated indoor/outdoor stranded cable.	Orange
FSNP636Y	36-fiber 62.5/125µm (OM1) multimode plenum rated indoor/outdoor stranded cable.	Orange
FSNP648Y	48-fiber 62.5/125µm (OM1) multimode plenum rated indoor/outdoor stranded cable.	Orange
FSCP506Y	6-fiber 50/125µm (OM2) multimode plenum rated indoor/outdoor central cable.	Orange
FSCP512Y	12-fiber 50/125µm (OM2) multimode plenum rated indoor/outdoor central cable.	Orange
FSNP524Y	24-fiber 50/125µm (OM2) multimode plenum rated indoor/outdoor stranded cable.	Orange
FSNP536Y	36-fiber 50/125µm (OM2) multimode plenum rated indoor/outdoor stranded cable.	Orange
FSNP548Y	48-fiber 50/125µm (OM2) multimode plenum rated indoor/outdoor stranded cable.	Orange
FOCPX06Y	6-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated indoor/outdoor central cable.	Aqua
FOCPX12Y	12-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated indoor/outdoor central cable.	Aqua
FONPX24Y	24-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated indoor/outdoor stranded cable.	Aqua
FONPX36Y	36-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated indoor/outdoor stranded cable.	Aqua
FONPX48Y	48-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated indoor/outdoor stranded cable.	Aqua
OPTI-CORE® Plenum Indoor/Outdoor All-Dielectric Cable (OFNP) – Singlemode		
FSCP906Y	6-fiber 9/125µm (OS1) singlemode plenum rated indoor/outdoor central cable.	Yellow
FSCP912Y	12-fiber 9/125µm (OS1) singlemode plenum rated indoor/outdoor central cable.	Yellow
FSNP924Y	24-fiber 9/125µm (OS1) singlemode plenum rated indoor/outdoor stranded cable.	Yellow
FSNP936Y	36-fiber 9/125µm (OS1) singlemode plenum rated indoor/outdoor stranded cable.	Yellow
FSNP948Y	48-fiber 9/125µm (OS1) singlemode plenum rated indoor/outdoor stranded cable.	Yellow

Contact Customer Service for minimum order quantities, availability, and additional product configurations. Options include jacket colors, hybrid constructions (multiple fiber types within a single cable), flame ratings, subunit counts, armoring, premium optical performance grades and ribbonized constructions.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

Cable Labels for *OPTI-CORE*® Fiber Optic Indoor/Outdoor All-Dielectric Cable



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Fiber Count	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
6 12	S100X225YAJ	S100X225VATY	S100X225VAC	T100X000CBC-BK
24 36 48	S100X650YAJ	S100X650VATY	S100X650VAC	T100X000CBC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

OPTI-CORE® Fiber Optic Indoor/Outdoor Interlocking Armored Cable

- Used within buildings and outdoor environments for transitional aerial and duct applications, and in entrance facilities that require riser (OFCR) or plenum (OFCP) rated cable
- Eliminates the need for building entrance transition point
- Interlocking aluminum armor eliminates the need for inner duct or conduit to provide a smaller crush resistant pathway for design flexibility and a lower installed cost
- UV resistant cable sheathing meets the light absorption requirement defined by Telcordia GR-20, Issue 2 to withstand harsh outdoor environmental demands
- Dry water-blocking technology allows rapid cable preparation and termination for lower termination costs and time (no messy gel required)
- Singlemode (OS1) and multimode (OM1, OM2, and *10GIG*™ OM3 laser optimized) fiber available
- Sheath markings provide positive identification, quality traceability, and length verification
- 250µm buffer coating protects fibers during handling and allows for ease of stripping
- *OPTI-CORE® 10GIG*™ Cable is designed to support network transmission speeds up to 10 Gb/s for link lengths up to 300m with an 850nm source per IEEE 802.3ae 10 GbE Standard; backward compatible for use with all 50/125µm system requirements



FSGR606Y



FOMRX24Y

Part Number	Part Description	Color
OPTI-CORE® Riser Indoor/Outdoor Interlocking Armored Cable (OFCR) – Multimode		
FSGR606Y	6-fiber 62.5/125µm (OM1) multimode riser rated indoor/outdoor interlocking armored central cable.	Black
FSGR612Y	12-fiber 62.5/125µm (OM1) multimode riser rated indoor/outdoor interlocking armored central cable.	Black
FSMR624Y	24-fiber 62.5/125µm (OM1) multimode riser rated indoor/outdoor interlocking armored stranded cable.	Black
FSMR636Y	36-fiber 62.5/125µm (OM1) multimode riser rated indoor/outdoor interlocking armored stranded cable.	Black
FSMR648Y	48-fiber 62.5/125µm (OM1) multimode riser rated indoor/outdoor interlocking armored stranded cable.	Black
FSGR506Y	6-fiber 50/125µm (OM2) multimode riser rated indoor/outdoor interlocking armored central cable.	Black
FSGR512Y	12-fiber 50/125µm (OM2) multimode riser rated indoor/outdoor interlocking armored central cable.	Black
FSMR524Y	24-fiber 50/125µm (OM2) multimode riser rated indoor/outdoor interlocking armored stranded cable.	Black
FSMR536Y	36-fiber 50/125µm (OM2) multimode riser rated indoor/outdoor interlocking armored stranded cable.	Black
FSMR548Y	48-fiber 50/125µm (OM2) multimode riser rated indoor/outdoor interlocking armored stranded cable.	Black
FOGRX06Y	6-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated indoor/outdoor interlocking armored central cable.	Black
FOGRX12Y	12-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated indoor/outdoor interlocking armored central cable.	Black
FOMRX24Y	24-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated indoor/outdoor interlocking armored stranded cable.	Black
FOMRX36Y	36-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated indoor/outdoor interlocking armored stranded cable.	Black
FOMRX48Y	48-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated indoor/outdoor interlocking armored stranded cable.	Black
OPTI-CORE® Riser Indoor/Outdoor Interlocking Armored Cable (OFCR) – Singlemode		
FSGR906Y	6-fiber 9/125µm (OS1) singlemode riser rated indoor/outdoor interlocking armored central cable.	Black
FSGR912Y	12-fiber 9/125µm (OS1) singlemode riser rated indoor/outdoor interlocking armored central cable.	Black
FSMR924Y	24-fiber 9/125µm (OS1) singlemode riser rated indoor/outdoor interlocking armored stranded cable.	Black
FSMR936Y	36-fiber 9/125µm (OS1) singlemode riser rated indoor/outdoor interlocking armored stranded cable.	Black
FSMR948Y	48-fiber 9/125µm (OS1) singlemode riser rated indoor/outdoor interlocking armored stranded cable.	Black

Contact Customer Service for minimum order quantities, availability, and additional product configurations. Options include jacket colors, hybrid constructions (multiple fiber types within a single cable), flame ratings, subunit counts, premium optical performance grades and ribbonized constructions.

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OPTI-CORE® Fiber Optic Indoor/Outdoor Interlocking Armored Cable (continued)



FSGP606Y



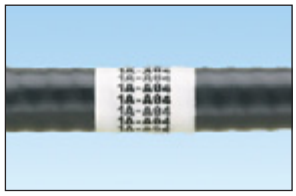
FOMPX24Y

Part Number	Part Description	Color
OPTI-CORE® Plenum Indoor/Outdoor Interlocking Armored Cable (OFCP) – Multimode		
FSGP606Y	6-fiber 62.5/125µm (OM1) multimode plenum rated indoor/outdoor interlocking armored central cable.	Orange
FSGP612Y	12-fiber 62.5/125µm (OM1) multimode plenum rated indoor/outdoor interlocking armored central cable.	Orange
FSMP624Y	24-fiber 62.5/125µm (OM1) multimode plenum rated indoor/outdoor interlocking armored stranded cable.	Orange
FSMP636Y	36-fiber 62.5/125µm (OM1) multimode plenum rated indoor/outdoor interlocking armored stranded cable.	Orange
FSMP648Y	48-fiber 62.5/125µm (OM1) multimode plenum rated indoor/outdoor interlocking armored stranded cable.	Orange
FSGP506Y	6-fiber 50/125µm (OM2) multimode plenum rated indoor/outdoor interlocking armored central cable.	Orange
FSGP512Y	12-fiber 50/125µm (OM2) multimode plenum rated indoor/outdoor interlocking armored central cable.	Orange
FSMP524Y	24-fiber 50/125µm (OM2) multimode plenum rated indoor/outdoor interlocking armored stranded cable.	Orange
FSMP536Y	36-fiber 50/125µm (OM2) multimode plenum rated indoor/outdoor interlocking armored stranded cable.	Orange
FSMP548Y	48-fiber 50/125µm (OM2) multimode plenum rated indoor/outdoor interlocking armored stranded cable.	Orange
FOGPX06Y	6-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated indoor/outdoor interlocking armored central cable.	Aqua
FOGPX12Y	12-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated indoor/outdoor interlocking armored central cable.	Aqua
FOMPX24Y	24-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated indoor/outdoor interlocking armored stranded cable.	Aqua
FOMPX36Y	36-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated indoor/outdoor interlocking armored stranded cable.	Aqua
FOMPX48Y	48-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated indoor/outdoor interlocking armored stranded cable.	Aqua
OPTI-CORE® Plenum Indoor/Outdoor Interlocking Armored Cable (OFCP)– Singlemode		
FSGP906Y	6-fiber 9/125µm (OS1) singlemode plenum rated indoor/outdoor interlocking armored central cable.	Yellow
FSGP912Y	12-fiber 9/125µm (OS1) singlemode plenum rated indoor/outdoor interlocking armored central cable.	Yellow
FSMP924Y	24-fiber 9/125µm (OS1) singlemode plenum rated indoor/outdoor interlocking armored stranded cable.	Yellow
FSMP936Y	36-fiber 9/125µm (OS1) singlemode plenum rated indoor/outdoor interlocking armored stranded cable.	Yellow
FSMP948Y	48-fiber 9/125µm (OS1) singlemode plenum rated indoor/outdoor interlocking armored stranded cable.	Yellow

Contact Customer Service for minimum order quantities, availability, and additional product configurations. Options include jacket colors, hybrid constructions (multiple fiber types within a single cable), flame ratings, subunit counts, premium optical performance grades and ribbonized constructions.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

Cable Labels for *OPTI-CORE*® Fiber Optic Indoor/Outdoor Interlocking Armored Cable



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Fiber Count	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
6 12	S100X225YAJ	S100X225VATY	S100X225VAC	T100X000CBC-BK
24 36 48	S100X650YAJ	S100X650VATY	S100X650VAC	T100X000CBC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

NEW! OPTI-CORE® Fiber Optic Outside Plant All-Dielectric Cable

- Allows installation using loose tube cable methods for aerial and duct applications
- All-dielectric cable construction requires no grounding or bonding
- UV resistant cable sheathing meets the light absorption requirement defined by Telcordia GR-20, Issue 2 and ICEA 640 to withstand harsh outdoor environmental demands
- Medium density polyethylene jacket provides low friction installation
- Dry water-blocking technology allows rapid cable preparation and termination for lower termination costs and time
- Singlemode (OS1) and multimode (OM1, OM2, and *10GIG*™ OM3 laser optimized) fiber available
- Sheath markings provide positive identification, quality traceability, and length verification
- 250µm buffer coating protects fibers during handling and allows for ease of stripping
- *OPTI-CORE® 10GIG*™ Cable is designed to support network transmission speeds up to 10 Gb/s for link lengths up to 300m with an 850nm source per IEEE 802.3ae 10 GbE Standard; backward compatible for use with all 50/125µm system requirements



Part Number	Part Description	Color
OPTI-CORE® Outside Plant All-Dielectric Cable – Multimode		
FSTN606	6-fiber 62.5/125µm (OM1) multimode outside plant stranded cable.	Black
FSTN612	12-fiber 62.5/125µm (OM1) multimode outside plant stranded cable.	Black
FSTN624	24-fiber 62.5/125µm (OM1) multimode outside plant stranded cable.	Black
FSTN636	36-fiber 62.5/125µm (OM1) multimode outside plant stranded cable.	Black
FSTN648	48-fiber 62.5/125µm (OM1) multimode outside plant stranded cable.	Black
FSTN506	6-fiber 50/125µm (OM2) multimode outside plant stranded cable.	Black
FSTN512	12-fiber 50/125µm (OM2) multimode outside plant stranded cable.	Black
FSTN524	24-fiber 50/125µm (OM2) multimode outside plant stranded cable.	Black
FSTN536	36-fiber 50/125µm (OM2) multimode outside plant stranded cable.	Black
FSTN548	48-fiber 50/125µm (OM2) multimode outside plant stranded cable.	Black
FOTNX06	6-fiber *10GIG*™ 50/125µm (OM3) multimode outside plant stranded cable.	Black
FOTNX12	12-fiber *10GIG*™ 50/125µm (OM3) multimode outside plant stranded cable.	Black
FOTNX24	24-fiber *10GIG*™ 50/125µm (OM3) multimode outside plant stranded cable.	Black
FOTNX36	36-fiber *10GIG*™ 50/125µm (OM3) multimode outside plant stranded cable.	Black
FOTNX48	48-fiber *10GIG*™ 50/125µm (OM3) multimode outside plant stranded cable.	Black
OPTI-CORE® Outside Plant All-Dielectric Cable – Singlemode		
FSTN906	6-fiber 9/125µm (OS1) singlemode outside plant stranded cable.	Black
FSTN912	12-fiber 9/125µm (OS1) singlemode outside plant stranded cable.	Black
FSTN924	24-fiber 9/125µm (OS1) singlemode outside plant stranded cable.	Black
FSTN936	36-fiber 9/125µm (OS1) singlemode outside plant stranded cable.	Black
FSTN948	48-fiber 9/125µm (OS1) singlemode outside plant stranded cable.	Black

Contact Customer Service for minimum order quantities, availability, and additional product configurations. Options include hybrid constructions (multiple fiber types within a single cable), subunit counts, armoring, premium optical performance grades and ribbonized constructions.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

NEW! UL LISTED OPTI-CORE® Fiber Optic Outside Plant Armored Cable

- Allows installation using loose tube cable methods for aerial, duct and direct-buried applications
- UV resistant cable sheathing meets the light absorption requirement defined by Telcordia GR-20, Issue 2 and ICEA 640 to withstand harsh outdoor environmental demands
- Medium density polyethylene jacket provides low friction installation and excellent protection from environmental hazards to extend protection and reliability
- Corrugated steel armor offers additional mechanical protection for direct-buried applications
- Dry water-blocking technology allows rapid cable preparation and termination for lower termination costs and time (no messy gel required)
- Singlemode (OS1) and multimode (OM1, OM2 and *10GIG*™ OM3 laser optimized) fiber available
- Sheath markings provide positive identification, quality traceability and length verification
- 250µm buffer coating protects fibers during handling and allows for ease of stripping
- *OPTI-CORE® 10GIG*™ Cable is designed to support network transmission speeds up to 10 Gb/s for link lengths up to 300m with an 850nm source per IEEE 802.3ae 10GbE Standard
- *OPTI-CORE® 10GIG*™ Cable is backward compatible for use with all 50/125µm system requirements



Part Number	Part Description	Color
OPTI-CORE® Outside Plant Armored Cable – Multimode		
FSWN606	6-fiber 62.5/125µm (OM1) multimode outside plant armored stranded cable.	Black
FSWN612	12-fiber 62.5/125µm (OM1) multimode outside plant armored stranded cable.	Black
FSWN624	24-fiber 62.5/125µm (OM1) multimode outside plant armored stranded cable.	Black
FSWN636	36-fiber 62.5/125µm (OM1) multimode outside plant armored stranded cable.	Black
FSWN648	48-fiber 62.5/125µm (OM1) multimode outside plant armored stranded cable.	Black
FSWN506	6-fiber 50/125µm (OM2) multimode outside plant armored stranded cable.	Black
FSWN512	12-fiber 50/125µm (OM2) multimode outside plant armored stranded cable.	Black
FSWN524	24-fiber 50/125µm (OM2) multimode outside plant armored stranded cable.	Black
FSWN536	36-fiber 50/125µm (OM2) multimode outside plant armored stranded cable.	Black
FSWN548	48-fiber 50/125µm (OM2) multimode outside plant armored stranded cable.	Black
FOWNX06	6-fiber *10GIG*™ 50/125µm (OM3) multimode outside plant armored stranded cable.	Black
FOWNX12	12-fiber *10GIG*™ 50/125µm (OM3) multimode outside plant armored stranded cable.	Black
FOWNX24	24-fiber *10GIG*™ 50/125µm (OM3) multimode outside plant armored stranded cable.	Black
FOWNX36	36-fiber *10GIG*™ 50/125µm (OM3) multimode outside plant armored stranded cable.	Black
FOWNX48	48-fiber *10GIG*™ 50/125µm (OM3) multimode outside plant armored stranded cable.	Black
OPTI-CORE® Outside Plant Armored Cable – Singlemode		
FSWN906	6-fiber 9/125µm (OS1) singlemode outside plant armored stranded cable.	Black
FSWN912	12-fiber 9/125µm (OS1) singlemode outside plant armored stranded cable.	Black
FSWN924	24-fiber 9/125µm (OS1) singlemode outside plant armored stranded cable.	Black
FSWN936	36-fiber 9/125µm (OS1) singlemode outside plant armored stranded cable.	Black
FSWN948	48-fiber 9/125µm (OS1) singlemode outside plant armored stranded cable.	Black

Contact Customer Service for minimum order quantities, availability, and additional product configurations. Options include hybrid constructions (multiple fiber types within a single cable), subunit counts, armoring options, premium optical performance grades and ribbonized constructions.

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OPTI-CORE® Fiber Optic Interconnect Cable

- Used in interconnect and horizontal installations for riser (OFNR), plenum (OFNP), and general-purpose environments
- Singlemode (OS1) and multimode (OM1, OM2, and *10GIG*™ OM3 850nm laser optimized) fiber available
- Sheath markings provide positive identification, quality traceability, and length verification
- Colored buffers for ease of identification
- High quality buffering offers ease of stripping while maintaining optical performance
- Small diameter and flexible jackets allow for routing in tight spaces such as panels, cable trays, and fiber-to-the-desk (FTTD) applications
- Other diameters available to meet your application needs
- *OPTI-CORE® 10GIG*™ Cable is designed to support network transmission speeds up to 10 Gb/s for link lengths up to 300m with an 850nm source per IEEE 802.3ae 10 GbE Standard; backward compatible for use with all 50/125µm system requirements



FSIR602Y



FOIRX02Y

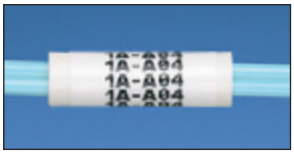


FSIP902Y

Part Number	Part Description	Color
OPTI-CORE® Riser Interconnect Cable (OFNR) – Multimode		
FSIR602Y	2-fiber 62.5/125µm (OM1) multimode riser rated interconnect cable; 2.9mm dia., zip-cord.	Orange
FSIR502Y	2-fiber 50/125µm (OM2) multimode riser rated interconnect cable; 2.9mm dia., zip-cord.	Orange
FOIRX02Y	2-fiber *10GIG*™ 50/125µm (OM3) multimode riser rated interconnect cable; 2.9mm dia., zip-cord.	Aqua
OPTI-CORE® Riser Interconnect Cable (OFNR) – Singlemode		
FSIR902Y	2-fiber 9/125µm (OS1) singlemode riser rated interconnect cable; 2.9mm dia., zip-cord.	Yellow
OPTI-CORE® Plenum Interconnect Cable (OFNP) – Multimode		
FSIP602Y	2-fiber 62.5/125µm (OM1) multimode plenum rated interconnect cable; 2.9mm dia., zip-cord.	Orange
FSIP502Y	2-fiber 50/125µm (OM2) multimode plenum rated interconnect cable; 2.9mm dia., zip-cord.	Orange
FOIPX02Y	2-fiber *10GIG*™ 50/125µm (OM3) multimode plenum rated interconnect cable; 2.9mm dia., zip-cord.	Aqua
OPTI-CORE® Plenum Interconnect Cable (OFNP) – Singlemode		
FSIP902Y	2-fiber 9/125µm (OS1) singlemode plenum rated interconnect cable; 2.9mm dia., zip-cord.	Yellow

Contact Customer Service for minimum order quantities, availability, and additional product configurations. Options include diameters, jacket colors, flame ratings and premium optical performance grades.

Cable Labels for OPTI-CORE® Fiber Optic Interconnect Cable



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Fiber Count	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER***™ **LS8E Hand-Held Printer Label**	***COUGAR***™ **LS9 Hand-Held Printer Label**
2	**S100X220YAJ and NWSLC-7Y**	**S100X225VATY and NWSLC-7Y**	**S100X220VAC and NWSLC-7Y**	**T100X000CBC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

MODULES

PANDUIT offers end-to-end solutions for copper, fiber, and audio/video cabling applications. *MINI-COM®* Modules exceed the latest TIA/EIA-568-B and ISO 11801 2nd Edition requirements for maximum performance and reliability and are designed for fast moves, adds, and changes. All modules are interchangeable within *PANDUIT® MINI-COM®* Modular Patch Panels, Faceplates, and Surface Mount Boxes. Multiple module colors allow color coding for network segregation to accommodate your specific network strategy.



- ***TX6™ 10GIG™* (Augmented Category 6) Jack Modules feature an enhanced termination method with true 10GBASE-T performance capabilities, as outlined in the IEEE 802.3an-2006 ratified standard for supporting 10GBASE-T**
- **Copper TX Style Jack Modules feature enhanced *GIGA-TX™* Technology optimizing performance by maintaining cable pair geometry and eliminating conductor untwist**
- ***TX* Style Jack Modules utilize a forward motion termination, placing no impact on critical internal components for maximum reliability**
- **RCA and S-video modules are available in both punchdown and pass-through versions**
- **Audio/video modules include 3.5mm stereo connectors, self-terminating F-type connector, and 15-pin high density D-subminiature connectors**
- **Fiber optic adapter modules are available with phosphor bronze or zirconia ceramic split sleeves to fit specific network requirements**

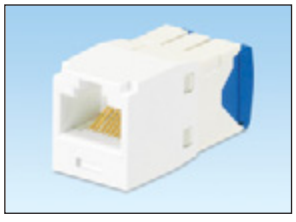
Copper modules include *TX6™ 10GIG™*, *TX6™ PLUS*, *TX5e™* and Category 3 Jack Modules, which are part of the *PANDUIT® TX6™ 10GIG™*, *TX6500™*, *TX6000™* and *TX5500™* Copper Cabling Systems. Shielded versions of the *TX6™ 10GIG™*, *TX6™ PLUS*, and *TX5e™* Jack Modules are also available. Audio/video connector modules are also available in multiple styles. Fiber optic adapter modules include LC, SC, MPO/MTP*, ST, MT-RJ and FC versions in *10GIG™*, multimode, and singlemode options.

*MTP is a registered trademark of US Conec Ltd.

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MINI-COM® TX6™ 10GIG™ UTP Jack Module

- Exceeds draft requirements of TIA/EIA-568-B.2-AD10 and ISO 11801 Class E_A Edition 2.1, and IEEE 802.3an-2006 ratified standard channel requirements for supporting 10GBASE-T
- Each jack is 100% tested to ensure NEXT and RL performance and is individually serialized for traceability
- Utilizes patent-pending enhanced *GIGA-TX*™ Technology for jack terminations which optimizes performance by maintaining cable pair geometry and eliminating conductor untwist
- No punchdown tool required; termination tool (EGJT) ensures conductors are fully terminated by utilizing a smooth forward motion without impact on critical internal components for maximum reliability
- Optional termination tool (TGJT) reduces termination time by 25%, ideal for high volume installations
- Can be re-terminated a minimum of twenty times
- Blue termination cap designates *10GIG*™ Augmented Category 6 performance and provides a positive strain relief; helps control cable bend radius and securely retains wires
- Terminates 4-pair, 22 – 26 AWG, 100 ohm, solid or stranded twisted pair cable
- Termination cap is color coded for T568A and T568B wiring schemes
- Accepts 6 and 8-position modular plugs without damage
- Can be clearly identified with optional labels and icons



Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CJ6X88TGIW	Augmented Category 6, RJ45, 10 Gb/s, 8-position, 8-wire universal module.	1	Off White	1	50
CJ6X88TGIW-24	Augmented Category 6, RJ45, 10 Gb/s, 8-position, 8-wire universal module, bulk packaged.	1	Off White	24	240

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray), BL (Black), OR (Orange), RD (Red), BU (Blue), GR (Green), YL (Yellow) or VL (Violet).
Termination tools available on page B2.19.
Compatible with *MINI-COM*® Modular Patch Panels, Faceplates, and Surface Mount Boxes.
Must be installed as part of a complete *TX6™ 10GIG*™ Copper Cabling System in order to achieve 10GBASE-T certified performance.

Component Labels for MINI-COM® TX6™ 10GIG™ UTP Jack Module



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Module Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
All *TX6™ 10GIG*™ Jack Modules	C138X019FJJ	C138X019YPT	C138X019FJC	T019X000FJC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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MINI-COM® TX6™ 10GIG™ Shielded Jack Module

- Exceeds draft requirements of TIA/EIA-568-B.2-AD10 and ISO 11801 Class E_A Edition 2.1, and IEEE 802.3an-2006 ratified standard channel requirements for supporting 10GBASE-T
- Each jack is 100% tested to ensure NEXT and RL performance and is individually serialized for traceability
- Utilizes patent-pending enhanced *GIGA-TX*™ Technology for jack terminations which optimizes performance by maintaining cable pair geometry and eliminating conductor untwist
- No punchdown tool required; termination tool (EGJT) ensures conductors are fully terminated by utilizing a smooth forward motion without impact on critical internal components for maximum reliability
- Optional termination tool (TGJT) reduces termination time by 25%, ideal for high volume installations
- Can be re-terminated a minimum of twenty times
- Blue termination cap designates *10GIG*™ Augmented Category 6 performance and provides a positive strain relief; helps control cable bend radius and securely retains wires
- Terminates 4-pair, 22 – 26 AWG, 100 ohm, solid or stranded shielded twisted pair cable
- Termination cap is color coded for T568A and T568B wiring schemes
- Integral shield with tab provides 360° conductive path for grounding
- .187" grounding tab provides conductive patch for grounding individual jacks
- Accepts 6 and 8-position modular plugs without damage
- Can be clearly identified with optional labels and icons



Part Number	Part Description	No. of Module Spaces	Std. Pkg. Qty.	Std. Ctn. Qty.
CJS6X88TGY	Augmented Category 6, RJ45, 10 Gb/s, 8-position, 8-wire universal shielded black module with integral shield.	1	1	50
CJS6X88TGY-24	Augmented Category 6, RJ45, 10 Gb/s, 8-position, 8-wire universal shielded black module with integral shield, bulk packaged.	1	24	240

Termination tools available on page B2.19.
Shield grounding requires proper installation of shielded jack module and the use of shielded patch cords and cable.
Compatible with *MINI-COM®* Modular Patch Panels, Faceplates, and Surface Mount Boxes.
For grounding shielded modules not installed in a shielded patch panel, see the shielded jack module grounding kit, CJSGK-XY on page C5.19.
Must be installed as part of a complete *TX6™ 10GIG™* Copper Cabling System in order to achieve 10GBASE-T certified performance.

Component Labels for MINI-COM® TX6™ 10GIG™ Shielded Jack Module



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Module Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
All *TX6™ 10GIG* Jack Modules	C138X019FJJ	C138X019YPT	C138X019FJC	T019X000FJC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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MINI-COM® TX6™ PLUS UTP Jack Module

- Exceeds TIA/EIA-568-B.2-1 Category 6 and ISO 11801 2nd Edition Class E standards
- Each jack is 100% tested to ensure NEXT and RL performance and is individually serialized for traceability
- Utilizes patent-pending enhanced GIGA-TX™ Technology for jack terminations which optimizes performance by maintaining cable pair geometry and eliminating conductor untwist
- No punchdown tool required; termination tool (EGJT) ensures conductors are fully terminated by utilizing a smooth forward motion without impact on critical internal components for maximum reliability
- Optional termination tool (TGJT) reduces termination time by 25%, ideal for high volume installations
- Can be re-terminated a minimum of twenty times
- Off white termination cap designates Category 6 *PLUS* performance and provides a positive strain relief; helps control cable bend radius and securely retains wires
- Terminates 4-pair, 22 – 26 AWG, 100 ohm, solid or stranded twisted pair cable
- Termination cap is color coded for T568A and T568B wiring schemes
- Accepts 6 and 8-position modular plugs without damage
- Can be clearly identified with optional labels and icons



Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CJ688TGIW	Category 6, RJ45, 8-position, 8-wire universal module.	1	Off White	1	50
CJ688TGIW-24	Category 6, RJ45, 8-position, 8-wire universal module, bulk packaged.	1	Off White	24	240

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray), BL (Black), OR (Orange), RD (Red), BU (Blue), GR (Green), YL (Yellow) or VL (Violet).
Termination tools available on page B2.19.
To ensure optimal performance, *PANDUIT* recommends use with other *PANDUIT* Category 6 *PLUS* components.
Compatible with MINI-COM® Modular Patch Panels, Faceplates, and Surface Mount Boxes.

Component Labels for MINI-COM® TX6™ PLUS UTP Jack Module



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Module Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
All *TX6™ PLUS* Jack Modules	**C138X019FJJ**	**C138X019YPT**	**C138X019FJC**	**T019X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® TX6™ PLUS Shielded Jack Module

- Exceeds TIA/EIA-568-B.2-1 Category 6 and ISO 11801 2nd Edition Class E standards
- Each jack is 100% tested to ensure NEXT and RL performance and is individually serialized for traceability
- Utilizes patent-pending enhanced *GIGA-TX™* Technology for jack terminations which optimizes performance by maintaining cable pair geometry and eliminating conductor untwist
- No punchdown tool required; termination tool (EGJT) ensures conductors are fully terminated by utilizing a smooth forward motion without impact on critical internal components for maximum reliability
- Optional termination tool (TGJT) reduces termination time by 25%, ideal for high volume installations
- Can be re-terminated a minimum of twenty times
- Off white termination cap designates Category 6 performance and provides a positive strain relief; helps control cable bend radius and securely retains wires
- Terminates 4-pair, 22 – 26 AWG, 100 ohm, solid or stranded shielded twisted pair cable
- Termination cap is color coded for T568A and T568B wiring schemes
- Integral shield tab provides 360° conductive path for grounding
- .187" tab provides conductive path for grounding individual jacks
- Accepts 6 and 8-position modular plugs without damage
- Can be clearly identified with optional labels and icons



Part Number	Part Description	No. of Module Spaces	Std. Pkg. Qty.	Std. Ctn. Qty.
CJS688TGY	Category 6, RJ45, 8-position, 8-wire universal shielded black module with integral shield.	1	1	50
CJS688TGY-24	Category 6, RJ45, 8-position, 8-wire universal shielded black module with integral shield, bulk packaged.	1	24	240

Termination tools available on page B2.19.
Shield grounding requires proper installation of shielded jack module and the use of shielded patch cords and cable.
To ensure optimal performance, *PANDUIT* recommends use with other *PANDUIT* Category 6 *PLUS* components.
Compatible with *MINI-COM®* Modular Patch Panels, Faceplates, and Surface Mount Boxes.
For grounding shielded modules not installed in a shielded patch panel, see the shielded jack module grounding kit, CJSGK-XY on page C5.19.

Component Labels for *MINI-COM® TX6™ PLUS* Shielded Jack Module



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Module Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER™* LS8E Hand-Held Printer Label**	***COUGAR™* LS9 Hand-Held Printer Label**
All *TX6™ PLUS* Jack Modules	**C138X019FJJ**	**C138X019YPT**	**C138X019FJC**	**T019X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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MINI-COM® TX5e™ UTP Jack Module

- Exceeds TIA/EIA-568-B.2 Category 5e and ISO 11801 2nd Edition Class D standards
- Each jack is 100% tested to ensure NEXT and RL performance and is individually serialized for traceability
- Utilizes patent-pending enhanced GIGA-TX™ Technology for jack terminations which optimizes performance by maintaining cable pair geometry and eliminating conductor untwist
- No punchdown tool required; termination tool (EGJT) ensures conductors are fully terminated by utilizing a smooth forward motion without impact on critical internal components for maximum reliability
- Optional termination tool (TGJT) reduces termination time by 25%, ideal for high volume installations
- Can be re-terminated a minimum of twenty times
- Red termination cap designates Category 5e performance and provides a positive strain relief; helps control cable bend radius and securely retains wires
- Terminates 4-pair, 22 – 26 AWG, 100 ohm, solid or stranded twisted pair cable
- Termination cap is color coded for T568A and T568B wiring schemes
- Accepts 6 and 8-position modular plugs without damage
- Can be clearly identified with optional labels and icons



Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CJ5E88TGIW	Category 5e, RJ45, 8-position, 8-wire universal module.	1	Off White	1	50
CJ5E88TGIW-24	Category 5e, RJ45, 8-position, 8-wire universal module, bulk packaged.	1	Off White	24	240

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray), BL (Black), OR (Orange), RD (Red), BU (Blue), GR (Green), YL (Yellow) or VL (Violet).
Termination tools available on page B2.19.
Compatible with MINI-COM® Modular Patch Panels, Faceplates, and Surface Mount Boxes.

Component Labels for MINI-COM® TX5e™ UTP Jack Module



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Module Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
All TX5e™ Jack Modules	**C138X019FJJ**	**C138X019YPT**	**C138X019FJC**	**T019X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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c UL us *MINI-COM® TX5e™* Shielded Jack Module

- Exceeds TIA/EIA-568-B.2 Category 5e and ISO 11801 2nd Edition Class D standards
- Each jack is 100% tested to ensure NEXT and RL performance and is individually serialized for traceability
- Utilizes patent-pending enhanced *GIGA-TX™* Technology for jack terminations which optimizes performance by maintaining cable pair geometry and eliminating conductor untwist
- No punchdown tool required; termination tool (EGJT) ensures conductors are fully terminated by utilizing a smooth forward motion without impact on critical internal components for maximum reliability
- Optional termination tool (TGJT) reduces termination time by 25%, ideal for high volume installations
- Can be re-terminated a minimum of twenty times
- Red termination cap designates Category 5e performance and provides a positive strain relief; helps control cable bend radius and securely retains wires
- Terminates 4-pair, 22 – 26 AWG, 100 ohm, solid or stranded shielded twisted pair cable
- Termination cap is color coded for T568A and T568B wiring schemes
- Integral shield tab provides 360° conductive path for grounding
- .187" tab provides conductive path for grounding individual jacks
- Accepts 6 and 8-position modular plugs without damage
- Can be clearly identified with optional labels and icons



Part Number	Part Description	No. of Module Spaces	Std. Pkg. Qty.	Std. Ctn. Qty.
CJS5E88TGY	Category 5e, RJ45, 8-position, 8-wire universal shielded black module with integrated shield.	1	1	50
CJS5E88TGY-24	Category 5e, RJ45, 8-position, 8-wire universal shielded black module with integrated shield, bulk packaged.	1	24	240

Termination tools available on page B2.19.
Compatible with *MINI-COM®* Modular Patch Panels, Faceplates, and Surface Mount Boxes.
Shield grounding requires proper installation of shielded jack module and the use of shielded patch cords and cable.
For grounding shielded modules not installed in a shielded patch panel, see the shielded jack module grounding kit, CJSGK-XY on page C5.19.

Component Labels for *MINI-COM® TX5e™* Shielded Jack Module



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Module Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER™* LS8E Hand-Held Printer Label**	***COUGAR™* LS9 Hand-Held Printer Label**
All *TX5e™* Jack Modules	**C138X019FJJ**	**C138X019YPT**	**C138X019FJC**	**T019X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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NEW! MINI-COM® Category 6 UTP Coupler Module

- Designed to exceed performance requirements of the TIA/EIA-568-B.2-1 Category 6 and ISO 11801 2nd Edition Class E channel standards
- RJ45 8-position, 8-wire female to RJ45 8-position, 8-wire female pass-through module
- Accepts 6 and 8-position modular plugs without damage
- Can be clearly identified with optional labels and icons
- Not suitable for surface mount box applications



Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CC688IW	Category 6, RJ45, 8-position, 8-wire universal coupler module.	1	Off White	1	50

‡For other colors replace suffix IW (Off White) with BL (Black).
Compatible with *MINI-COM®* Modular Patch Panels and Faceplates.

c UL us MINI-COM® Category 5e UTP Coupler Module

- Designed to exceed performance requirements of the TIA/EIA-568-B.2 Category 5e and ISO 11801 2nd Edition Class D channel standards
- RJ45 8-position, 8-wire female to RJ45 8-position, 8-wire female pass-through module
- Accepts 6 and 8-position modular plugs without damage
- Can be clearly identified with optional labels and icons
- Not suitable for surface mount box applications



Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CC5E88IW	Category 5e, RJ45, 8-position, 8-wire universal coupler module.	1	Off White	1	50

‡For other colors replace suffix IW (Off White) with BL (Black).
Compatible with *MINI-COM®* Modular Patch Panels and Faceplates.

UL LISTED SA CERTIFIED MINI-COM® MINI-JACK™ Category 3 UTP Jack Modules

- Patented lead frame termination style ensures twists are maintained to within 1/2"
- No punchdown tool required, optional termination tool (CJT-X) ensures conductors are fully terminated
- Termination cap provides excellent strain relief; helps control cable bend radius and securely retains wires
- Clear, removable termination cap provides easy troubleshooting
- Terminate 4-pair 24 and 22 AWG 100 ohm solid unshielded twisted pair cable
- Accept 6 and 8-position modular plugs without damage
- White colored module base designates Category 3 performance
- Can be clearly identified with optional labels and icons
- Compatible with *MINI-COM®* Modular Patch Panels, Faceplates, and Surface Mount Boxes



CJ88Y**



CJ66UY**



CJ66Y**



CJ64Y**

Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CJ88IWY	Category 3, 8-position, 8-wire universal module. Termination cap is color coded for T568A and T568B wiring schemes.	1	Off White	1	50
CJ66UIWY	6-position, 6-wire module. Termination cap is color coded for USOC wiring scheme.	1	Off White	1	50
CJ66IWY	6-position, 6-wire module.	1	Off White	1	50
CJ64IWY	6-position, 4-wire module.	1	Off White	1	50

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).
Termination tools available on page B2.19.
Compatible with *MINI-COM®* Modular Patch Panels and Faceplates.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Component Labels for *MINI-COM*® Coupler Modules and *MINI-COM*® *MINI-JACK*™ Category 3 Jack Modules



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Module Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
All Coupler Modules and Category 3 Jack Modules	C138X019FJJ	C138X019YPT	C138X019FJC	T019X000FJC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Jack Module Blockout Device

- Blocks unauthorized access to jacks and potentially harmful foreign objects, saving time and money associated with data security breaches, network downtime, repair and hardware replacement
- Compatible with most RJ45 jacks to accommodate a variety of applications and does not interfere with jack contacts
- Can be installed/removed without interfering with adjacent jacks or hardware
- May only be released with the special removal tool, ensuring the safety and security of your network infrastructure





Part Number	Part Description	Color	Std. Pkg. Qty.*	Std. Ctn. Qty.
PSL-DCJB*	Package of ten jack module blockout devices and one removal tool.	Red	1	20
PSL-DCJB-BL*	Package of ten jack module blockout devices and one removal tool.	Black	1	20
PSL-DCJB-BU*	Package of ten jack module blockout devices and one removal tool.	Blue	1	20
PSL-DCJB-YL*	Package of ten jack module blockout devices and one removal tool.	Yellow	1	20
PSL-DCJB-IW*	Package of ten jack module blockout devices and one removal tool.	International White	1	20

*Available in bulk packages of 100 devices and five removal tools. To order bulk package add -C to the suffix of part number.

MINI-COM® F-Type Module

- Typical use in CATV applications
- Compatible with *MINI-COM*® Modular Patch Panels, Faceplates, and Surface Mount Boxes
- Accepts RG-6 and RG-59 coaxial cable



Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CMFIW	Module supplied with 75 ohm industry standard F-type coupler.	1	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).

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MINI-COM® Self-Terminating F-Type Module

- Eliminates need for termination cap on connector
- Automatically puts 75 ohm load on cable run when cable is disconnected
- Reduces noise and interference on the line
- Compatible with MINI-COM® Modular Patch Panels, Faceplates, and Surface Mount Boxes
- Accepts RG-6 and RG-59 coaxial cable



Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CMFSRIWY	Module supplied with 75 ohm self-terminating F-type coupler.	1	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).

MINI-COM® BNC Coax Coupler Modules

- Accept BNC plugs
- Available in 50 and 75 ohm versions
- Compatible with MINI-COM® Modular Patch Panels, Faceplates, and Surface Mount Boxes
- Accept RG-6 and RG-59 coaxial cable



CMBA75**Y

Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CMBA75IWY	Module supplied with 75 ohm industry standard BNC coupler.	1	Off White	1	10
CMBAIWY	Module supplied with 50 ohm industry standard BNC coupler.	1	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).

MINI-COM® RCA 110 Punchdown Modules

- Terminate 24 and 22 AWG solid or stranded conductors
- Utilize Category 5e unshielded twisted pair or higher network cable facilitating a common, easy, and cost effective cabling installation; only two of the eight network cable conductors need to be terminated per cable
- Include wire retention cap
- Compatible with MINI-COM® Modular Patch Panels, Faceplates, and Surface Mount Boxes



CJRY

Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CJRYIW	Module supplied with one RCA connector with yellow insert.	1	Off White	1	10
CJRRIW	Module supplied with one RCA connector with red insert.	1	Off White	1	10
CJRWIW	Module supplied with one RCA connector with white insert.	1	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).
Punchdown termination tool available on page C1.44
Optional punchdown base AVPDB available on page B2.19.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® RCA Pass-Through Modules

- Supplied with one RCA coupler
- Compatible with MINI-COM® Modular Patch Panels, Faceplates, and Surface Mount Boxes



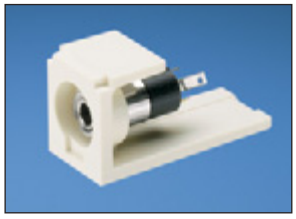
CMRPR

Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CMRPRIW	Module supplied with one RCA pass-through coupler with red insert.	1	Off White	1	10
CMRPYIW	Module supplied with one RCA pass-through coupler with yellow insert.	1	Off White	1	10
CMRPWIW	Module supplied with one RCA pass-through coupler with white insert.	1	Off White	1	10
CMRPBIW	Module supplied with one RCA pass-through coupler with blue insert.	1	Off White	1	10
CMRPGIW	Module supplied with one RCA pass-through coupler with green insert.	1	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).

MINI-COM® 3.5mm Stereo Connector and Coupler Modules

- Supplied with one solder-type connector or coupler
- Accept male plug found on typical stereo headsets
- Solder-type connector accepts 22 AWG stereo wire or smaller
- Insulation resistance exceeds 100 milli-ohms at DC 500 V
- Rated for DC 12 V, 1 A
- Compatible with MINI-COM® Modular Patch Panels, Faceplates, and Surface Mount Boxes



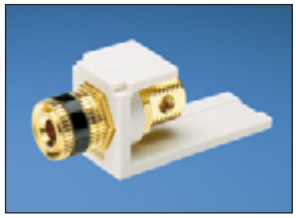
CM35MSS

Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CM35MSCIWY	3.5mm stereo coupler module.	1	Off White	1	10
CM35MSSIW	Module supplied with one 3.5mm (1/8") stereo headset solder-type connector.	1	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).

MINI-COM® 5-Way Binding Post Modules

- Allow for easy installation of speaker wires, along with the ability to reconfigure speaker locations with greater ease
- Accept a variety of termination ends, including bare speaker wire (10 – 12 AWG) and banana plugs
- Gold plated and large metal contact area facilitates improved signal transmission
- Red or black stripe around collar of binding post clearly designates speaker connection
- Compatible with MINI-COM® Modular Patch Panels, Faceplates, and Surface Mount Boxes



CMBPB**Y

Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CMBPBIWY	Module supplied with one 5-way binding post with black stripe.	1	Off White	1	10
CMBPRIWY	Module supplied with one 5-way binding post with red stripe.	1	Off White	1	10

‡For other colors, replace suffix IW (Off White) with EI (Electic Ivory) or WH (White).

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MINI-COM® 15-Pin High Density D-Subminiature Module

- Field terminable module features 15-pin screw terminal
- Dual module configuration allows it to be installed in MINI-COM® Faceplates (plastic and stainless steel)
- SVGA compatible
- Compatible with select MINI-COM® Modular Patch Panels, Faceplates, and Surface Mount Boxes

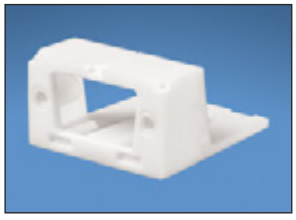


Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CMD15HDIWY	2-position module supplied with one 15-pin DB connector mounted to a printed circuit board; terminates on site.	2	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).

MINI-COM® Module Base for D-Subminiature Connectors

- Accepts 9-pin or 15-pin high density connector, male or female, solder or crimp type (connector not included)
- Compatible with select MINI-COM® Modular Patch Panels, Faceplates, and Surface Mount Boxes



Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CMDBIW-X	2-position module base which accepts 9-pin and 15-pin high density D-subminiature connectors.	2	Off White	10	100

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).

MINI-COM® S-Video Punchdown Module

- Terminates 24 and 22 AWG solid or stranded conductors
- Utilizes Category 5e unshielded twisted pair or higher network cable facilitating a common, easy, and cost effective cabling installation; only four of the eight network cable conductors need to be terminated per cable
- Includes wire retention cap
- Compatible with MINI-COM® Modular Patch Panels, Faceplates, and Surface Mount Boxes



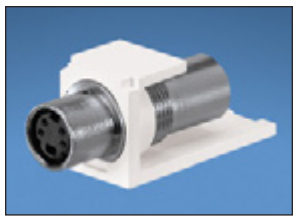
Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CJSVIW	Module supplied with one S-video connector.	1	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).
Punchdown termination tool available on page C1.44.
Optional punchdown base, AVPDB, available on page B2.19.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® S-Video Pass-Through Module

- Supplied with one 4-pin mini DIN coupler
- Compatible with *MINI-COM*® Modular Patch Panels, Faceplates, and Surface Mount Boxes

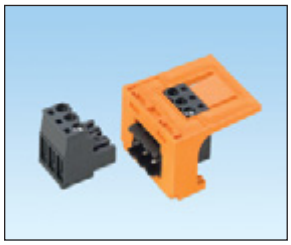


Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CMSVCIWY	Module supplied with one S-video pass-through coupler.	1	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).

NEW! *MINI-COM*® BAS Connector Module

- Standard field bus connector terminates up to three 18 – 22 AWG connectors or shielded/unshielded cable
- No punchdown tool required, terminates with screwdriver
- Common declaration point for BAS networks and low voltage power for building systems
- Compatible with *MINI-COM*® Modular Patch Panels, Faceplates, and Surface Mount Boxes



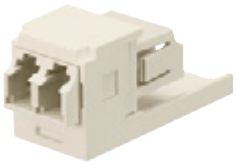
Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CMBRS485OR	Module supplied with 22 AWG min/18 AWG max connector.	2	Orange	1	10

‡For other colors replace suffix OR (Orange) with BL (Black), BU (Blue), GR (Green), RD (Red) or YL (Yellow).

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MINI-COM® LC Sr./Sr. Fiber Optic Adapter Modules

- TIA/EIA-604 FOCIS-10 compatible adapters
- Exceed TIA/EIA-568-B.3 requirements
- Small form factor (SFF) duplex adapter design fits into single module space
- Compatible with MINI-COM® products for complete modularity
- Provide a FOCIS-10 senior adapter interface at each end
- Accept FOCIS-10 compatible senior LC connectors
- Choice of phosphor bronze or zirconia ceramic split sleeves to fit specific network requirements; zirconia ceramic split sleeves are required for singlemode applications
- Every adapter is laser marked with Q.C. number to assure 100% traceability
- MINI-COM® LC Duplex Adapter Modules are commonly used with MINI-COM® Faceplates and Surface Mount Boxes
- LC simplex and duplex adapters are also available separately on page C2.18, and in patch panels or fiber adapter panels to provide a complete LC system solution



CMDSLC



CMDSAQLC



CMDSLCZ

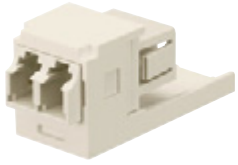
Part Number	Part Description	No. of Module Spaces	Module Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
LC Sr./Sr. Multimode Fiber Optic Adapter Modules (Electric ivory adapters)					
CMDSLCEI	Module supplied with one LC Sr./Sr. SFF duplex multimode fiber optic adapter (EI) with phosphor bronze split sleeves.	1	Electric Ivory	1	10
LC Sr./Sr. *10GIG*™ Multimode Fiber Optic Adapter Modules (Aqua adapters)					
CMDSAQLCBL	Module supplied with one LC Sr./Sr. *10GIG*™ SFF Duplex Multimode Fiber Optic Adapter (AQ) with phosphor bronze split sleeves.	1	Black	1	10
CMDSAQLCZBL	Module supplied with one LC Sr./Sr. *10GIG*™ SFF Duplex Multimode Fiber Optic Adapter (AQ) with zirconia ceramic split sleeves.	1	Black	1	10
LC Sr./Sr. Singlemode Fiber Optic Adapter Modules (Blue adapters)					
CMDSLCZBU	Module supplied with one LC Sr./Sr. SFF duplex singlemode fiber optic adapter (BU) with zirconia ceramic split sleeves.	1	Blue	1	10

‡For other colors replace suffix EI (Electric Ivory) or BU (Blue) with EI (Electric Ivory), BU (Blue), BL (Black), IW (Off White) or AW (Arctic White). *10GIG*™ Adapters are available in black modules only.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® LC Sr./Jr. Fiber Optic Adapter Modules

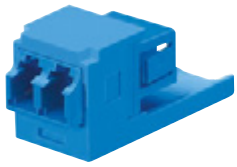
- TIA/EIA-604 FOCIS-10 compatible adapters
- Exceed TIA/EIA-568-B.3 requirements
- Small form factor (SFF) duplex adapter design fits into single module space
- Compatible with *MINI-COM*® products for complete modularity
- Accept FOCIS-10 compatible senior LC connectors at either end and FOCIS-10 junior LC connectors at the inside end for behind the wall applications
- Choice of phosphor bronze or zirconia ceramic split sleeves to fit specific network requirements; zirconia ceramic split sleeves are required for singlemode applications
- Every adapter is laser marked with Q.C. number to assure 100% traceability
- *MINI-COM*® LC Duplex Adapter Modules are commonly used with *MINI-COM*® Faceplates and Surface Mount Boxes
- LC simplex and duplex adapters are also available separately on page C2.18 and in patch panels or fiber adapter panels to provide a complete LC system solution



CMDJLC



CMDJAQLC



CMDJLCZ

Part Number	Part Description	No. of Module Spaces	Module Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
LC Sr./Jr. Multimode Fiber Optic Adapter Modules (Electric ivory adapters)					
CMDJLCEI	Module supplied with one LC Sr./Jr. SFF duplex multimode fiber optic adapter (EI) with phosphor bronze split sleeves.	1	Electric Ivory	1	10
LC Sr./Jr. *10GIG*™ Multimode Fiber Optic Adapter Modules (Aqua adapters)					
CMDJAQLCBL	Module supplied with one LC Sr./Jr. *10GIG*™ SFF Duplex Multimode Fiber Optic Adapter (AQ) with phosphor bronze split sleeves.	1	Black	1	10
CMDJAQLCZBL	Module supplied with one LC Sr./Jr. *10GIG*™ SFF Duplex Multimode Fiber Optic Adapter (AQ) with zirconia ceramic split sleeves.	1	Black	1	10
LC Sr./Jr. Singlemode Fiber Optic Adapter Modules (Blue adapters)					
CMDJLCZBU	Module supplied with one LC Sr./Jr. SFF duplex singlemode fiber optic adapter (BU) with zirconia ceramic split sleeves.	1	Blue	1	10

‡For other colors replace suffix EI (Electric Ivory) or BU (Blue) with EI (Electric Ivory), BU (Blue), BL (Black), IW (Off White) or AW (Arctic White). *10GIG*™ Adapters are available in black modules only.

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MINI-COM® SC Fiber Optic Adapter Modules

- TIA/EIA-604 FOCIS-3 compliant adapters
- Exceed TIA/EIA-568-B.3 requirements
- Compatible with MINI-COM® products for complete modularity
- Improved protective cap fully surrounds split sleeve opening
- Choice of phosphor bronze or zirconia ceramic split sleeves to fit specific network requirements; zirconia ceramic split sleeves are required for singlemode applications
- Every adapter is laser marked with Q.C. number to assure 100% traceability
- MINI-COM® SC Simplex Adapter Modules are commonly used with MINI-COM® Patch Panels
- MINI-COM® SC Duplex Adapter Modules are commonly used with MINI-COM® Surface Mount Boxes
- SC simplex and duplex adapters are also available separately on page C2.19, and in patch panels or fiber adapter panels to provide a complete SC system solution



CMDEISC



CMDAQSC



CMSBUSCZ



CMSAGSCZ

Part Number	Part Description	No. of Module Spaces	Module Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
SC Multimode Fiber Optic Adapter Modules (Electric ivory adapters)					
CMSEISCEI	Module supplied with one SC simplex multimode fiber optic adapter (EI) with phosphor bronze split sleeve.	1	Electric Ivory	1	10
CMDEISCEI	Module supplied with one SC duplex multimode fiber optic adapter (EI) with phosphor bronze split sleeves.	2	Electric Ivory	1	10
SC *10GIG*™ Multimode Fiber Optic Adapter Modules (Aqua adapters)					
CMSAQSCBL	Module supplied with one SC *10GIG*™ Simplex Multimode Fiber Optic Adapter (AQ) with phosphor bronze split sleeve.	1	Black	1	10
CMSAQSCZBL	Module supplied with one SC *10GIG*™ Simplex Multimode Fiber Optic Adapter (AQ) with zirconia ceramic split sleeve.	1	Black	1	10
CMDAQSCBL	Module supplied with one SC *10GIG*™ Duplex Multimode Fiber Optic Adapter (AQ) with phosphor bronze split sleeves.	2	Black	1	10
CMDAQSCZBL	Module supplied with one SC *10GIG*™ Duplex Multimode Fiber Optic Adapter (AQ) with zirconia ceramic split sleeves.	2	Black	1	10
SC Singlemode Fiber Optic Adapter Modules (Blue adapters)					
CMSBUSCZBU	Module supplied with one SC simplex singlemode fiber optic adapter (BU) with zirconia ceramic split sleeve.	1	Blue	1	10
CMDBUSCZBU	Module supplied with one SC duplex singlemode fiber optic adapter (BU) with zirconia ceramic split sleeves.	2	Blue	1	10
SC APC Singlemode Fiber Optic Adapter Modules (Green adapters)					
CMSAGSCZBL	Module supplied with one SC APC simplex singlemode fiber optic adapter (AG) with zirconia ceramic split sleeve.	1	Black	1	10
CMDAGSCZBL	Module supplied with one SC APC duplex singlemode fiber optic adapter (AG) with zirconia ceramic split sleeves.	2	Black	1	10

‡For other colors replace suffix EI (Electric Ivory) or BU (Blue) with EI (Electric Ivory), BU (Blue), BL (Black), IW (Off White) or AW (Arctic White). *10GIG*™ and APC Adapters are available in black modules only.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® MPO/MTP* Fiber Optic Adapter Module

- TIA/EIA-604 FOCIS-5 compliant adapter
- Exceeds TIA/EIA-568-B.3 requirements
- Compatible with *MINI-COM*® products for complete modularity
- Designed for multimode or singlemode MPO or MTP* connectors, patch cords, or cable assemblies
- *MINI-COM*® MPO/MTP* Adapter Modules are commonly used with *MINI-COM*® Surface Mount Boxes for a complete MPO/MTP* solution



Part Number	Part Description	No. of Module Spaces	Module Color	Std. Pkg. Qty.	Std. Ctn. Qty.
CMMPOBLBL	Module supplied with one MPO/MTP* fiber optic adapter.	2	Black	1	10

For MTP* Connector Cleaning Tools, see page C2.24.
*MTP is a registered trademark of US Conec Ltd.

MINI-COM® ST Fiber Optic Adapter Modules

- TIA/EIA-604 FOCIS-2 compatible adapters
- Exceed TIA/EIA-568-B.3 requirements
- Compatible with *MINI-COM*® products for complete modularity
- Choice of phosphor bronze or zirconia ceramic split sleeves to fit specific network requirements; zirconia ceramic split sleeves are required for singlemode applications
- *MINI-COM*® ST Simplex Adapter Modules are commonly used with *MINI-COM*® Patch Panels
- ST simplex adapters are also available in patch panels or fiber adapter panels to provide a complete ST system solution



CMSTZ

Part Number	Part Description	No. of Module Spaces	Module Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
ST Multimode Fiber Optic Adapter Modules					
CMSTEI	Module supplied with one ST multimode fiber optic adapter with phosphor bronze split sleeve.	1	Electric Ivory	1	10
ST Singlemode Fiber Optic Adapter Modules					
CMSTZBU	Module supplied with one ST singlemode fiber optic adapter with zirconia ceramic split sleeve.	1	Blue	1	10

‡For other colors replace suffix EI (Electric Ivory) or BU (Blue) with EI (Electric Ivory), BU (Blue), BL (Black), IW (Off White) or AW (Arctic White).

MINI-COM® MT-RJ Fiber Optic Adapter Modules

- TIA/EIA-604 FOCIS-12 compliant adapter
- Exceed TIA/EIA-568-B.3 requirements
- Compatible with *MINI-COM*® products for complete modularity
- Designed for multimode MT-RJ connectors and patch cords
- *MINI-COM*® MT-RJ Duplex Adapter Modules are commonly used with *MINI-COM*® Faceplates and Surface Mount Boxes



Part Number	Part Description	No. of Module Spaces	Module Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CMMJEI	MT-RJ multimode duplex fiber optic adapter module.	1	Electric Ivory	1	10

‡For other colors replace suffix EI (Electric Ivory) with BL (Black), BU (Blue), IW (Off White) or AW (Arctic White).

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MINI-COM® FC Fiber Optic Adapter Modules

- TIA/EIA-604 FOCIS-4 compliant adapters
- Exceed TIA/EIA-568-B.3 requirements
- Compatible with *MINI-COM*® products for complete modularity
- Choice of phosphor bronze or zirconia ceramic split sleeves to fit specific network requirements; zirconia ceramic split sleeves are required for singlemode applications
- *MINI-COM*® FC Simplex Adapter Modules are commonly used with *MINI-COM*® Patch Panels
- FC simplex adapters are also available in patch panels and fiber adapter panels to provide a complete FC system solution



CMFC

Part Number	Part Description	No. of Module Spaces	Module Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
FC Multimode Fiber Optic Adapter Modules					
CMFCEI	Module supplied with one FC multimode fiber optic adapter with phosphor bronze split sleeve.	1	Electric Ivory	1	10
FC Singlemode Fiber Optic Adapter Modules					
CMFCZBU	Module supplied with one FC singlemode fiber optic adapter with zirconia ceramic split sleeve.	1	Blue	1	10

‡For other colors replace suffix EI (Electric Ivory) or BU (Blue) with BL (Black), IW (Off White), or AW (Arctic White).

MINI-COM® Blank Module

- Secures opening to prevent tampering
- Compatible with *MINI-COM*® Modular Patch Panels, Faceplates, and Surface Mount Boxes



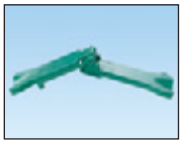
Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CMBIW-X	1-position, reserves space for future use.	1	Off White	10	50

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® Module Termination Tools

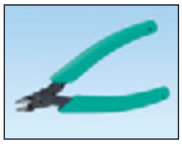
- EGJT tool assists in terminating all enhanced *GIGA-TX*™ Style Jack Modules by ensuring conductors are fully terminated by utilizing smooth forward motion without impact on critical internal components for maximum reliability
- CJT-X tool assists in terminating all *MINI-COM*® *MINI-JACK*™ Jack Modules by ensuring conductors are fully terminated
- CWST snipping tool cuts conductors flush for improved performance
- CJAST strips outer jacket of UTP and STP cable
- Punchdown base (AVPDB) available for terminating S-video and RCA punchdown modules
- TGJT termination tool easily terminates all TG style jack modules, reducing installation time by 25%



EGJT



CJT-X



CWST



CJAST



AVPDB



TGJT

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
EGJT	Terminates enhanced *GIGA-TX*™ Style Jack Modules.	1	50
CJT-X	Terminates *MINI-COM*® *MINI-JACK*™ Jack Modules.	10	50
CWST	Copper wire snipping tool, cuts conductors flush for improved performance.	1	—
CJAST	Adjustable, single handed cable jacket stripping tool, strips outer jacket of 4-pair UTP and shielded cable.	1	—
AVPDB	Audio/video punchdown base used to assist in terminating *MINI-COM*® S-Video and RCA Punchdown Modules.	1	50
TGJT	TG style termination tool easily terminates all TG style jack modules by cutting conductors flush and assembling wire cap and jack. Ideal for high volume installations.	1	—

Patch cord and connector removal tools for high density applications are available on pages C1.32 and C2.24.

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A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

NOTES

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WORK AREA OUTLET SOLUTIONS

PANDUIT offers the most complete selection of communication outlets to extend your copper, audio/video, and fiber cabling system to the work area. From a standard work station configuration to a MuTOA application, *PANDUIT* has a solution to support your requirements.







- **Completely modular, accepting all *MINI-COM*® Modules for copper, fiber, and audio/video applications**
- **Superior design provides lower profile, higher density outlet products, creating a cost effective solution for easy moves, adds, and changes**
- **Aesthetically pleasing solution to complement all types of work areas**
- ***ULTIMATE ID*® components are part of a complete system for identification designed to efficiently support TIA/EIA-606-A standard labeling requirements**

Work area outlet products are easily installed and provide a broad range of solutions. Outlet solutions consist of a variety of faceplate styles and port densities, including tamper resistant and water resistant options. Surface mount boxes are available in shuttered and non-shuttered versions.

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Workstation Roadmap



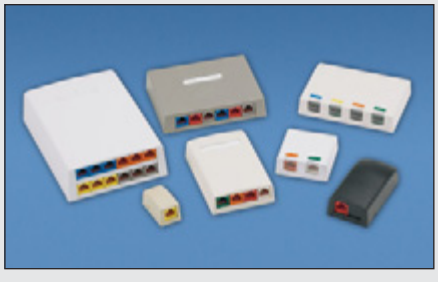
1 ***MINI-COM*® Faceplates (pages B3.3 – B3.14)**



2 ***MINI-COM*® Modular Furniture Faceplates (pages B3.19 – B3.20)**



3 ***MINI-COM*® Surface Mount Boxes (pages B3.23 – B3.27)**



Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® ULTIMATE ID® Classic Series Faceplates

- *ULTIMATE ID®* components are part of a complete system for identification designed to efficiently support TIA/EIA-606-A standard labeling requirements; reference page A1.6 for a complete system overview
- Accept *MINI-COM®* Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Supplied with color coordinated screw cover and clear station and port label covers, labels sold separately
- Can be clearly identified with the *PANTHER™* LS8E or *COUGAR™* LS9 Hand-Held Thermal Transfer Printers
- Non-adhesive computer printable label sheets for desktop printers and write-on labels available
- Replacement screw covers and label covers available
- Optional screw kit required for junction box mounting (JB*)
- Optional icons available

ULTIMATE ID


UICFP2


UICFP4


UICFP6


UICFPH2


UICFPH4

Part Number	Part Description	Color‡	Labels Required*	Std. Pkg. Qty.	Std. Ctn. Qty.
UICFP2IW	Single gang, vertical faceplate holds up to two *MINI-COM®* Modules.	Off White	One 1-Port One 2-Port	1	10
UICFP4IW	Single gang, vertical faceplate holds up to four *MINI-COM®* Modules.	Off White	One 1-Port Two 2-Port	1	10
UICFP6IW	Single gang, vertical faceplate holds up to six *MINI-COM®* Modules. Requires min. 1.9" wide in-wall box or wallboard adapter for proper installation.	Off White	One 1-Port Two 3-Port	1	10
UICFPH2IW	Single gang, horizontal faceplate holds up to two *MINI-COM®* Modules.	Off White	One 1-Port One 2-Port	1	10
UICFPH4IW	Single gang, horizontal faceplate holds up to four *MINI-COM®* Modules.	Off White	One 1-Port One 4-Port	1	10

‡For other colors replace IW (Off White) with EI (Electric Ivory) or WH (White).
All faceplates supplied with mounting screws.
**ULTIMATE ID®* Labels can be found on page F1.8.

MINI-COM® Classic Series Faceplates with Label and Label Cover

- Accept *MINI-COM®* Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Include label/label covers for easy port identification
- Replacement label/label covers available


CFPL2**Y


CFPL3**Y


CFPL4**Y


CFPL6**Y

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CFPL2IWY	Single gang, vertical faceplate accepts two *MINI-COM®* Modules.	Off White	1	10
CFPL3IWY	Single gang, vertical faceplate accepts three *MINI-COM®* Modules.	Off White	1	10
CFPL4IWY	Single gang, vertical faceplate accepts four *MINI-COM®* Modules.	Off White	1	10
CFPL6IWY	Single gang, vertical faceplate accepts six *MINI-COM®* Modules.	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), or IG (International Gray).
All faceplates supplied with mounting screws.

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Component Labels for *MINI-COM*® Classic Series Faceplates with Label and Label Cover



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
All CFPL Parts	**C195X040Y1J**	**C195X040Y1T**	**C195X040Y1C**	**T038X000FJC-BK‡**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For non-adhesive labeling solution, do not remove liner from label.

MINI-COM® Classic Series Sloped Faceplates with Label and Label Cover

- Accept *MINI-COM*® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Include label/label covers for easy port identification
- Replacement label/label covers available
- Optional icons available



CFPSL2Y**



CFPSL4Y**



CFPSL6Y**



CFPHSL4Y**

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CFPSL2IWY	Single gang, sloped vertical faceplate accepts two *MINI-COM*® Modules.	Off White	1	10
CFPSL4IWY	Single gang, sloped vertical faceplate accepts four *MINI-COM*® Modules.	Off White	1	10
CFPSL6IWY	Single gang, sloped vertical faceplate accepts six *MINI-COM*® Modules. Requires minimum 1.9" wide electrical box for proper mounting.	Off White	1	10
CFPHSL4IW	Single gang, sloped horizontal faceplate accepts four *MINI-COM*® Modules.	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), or IG (International Gray).
All faceplates supplied with mounting screws.

Component Labels for *MINI-COM*® Classic Series Sloped Faceplates with Label and Label Cover



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
All CFPSL Parts	**C195X040Y1J**	**C195X040Y1T**	**C195X040Y1C**	**T038X000FJC-BK‡**
All CFPHSL4 Parts	**C261X035Y1J**	**C261X035Y1T**	**C261X035Y1C**	**T038X000FJC-BK‡**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For non-adhesive labeling solution, do not remove liner from label.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® Classic Series Faceplates

- Accept MINI-COM® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Optional adhesive labels available


CFP1


CFP2


CFP4


CFPH2


CFPH4

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CFP1IW	Single gang, vertical faceplate accepts one MINI-COM® Module.	Off White	1	10
CFP2IW	Single gang, vertical faceplate accepts two MINI-COM® Modules.	Off White	1	10
CFP4IW	Single gang, vertical faceplate accepts four MINI-COM® Modules.	Off White	1	10
CFPH2IW	Single gang, horizontal faceplate accepts two MINI-COM® Modules.	Off White	1	10
CFPH4IW	Single gang, horizontal faceplate accepts four MINI-COM® Modules.	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), or IG (International Gray).
All faceplates supplied with mounting screws.

Component Labels for MINI-COM® Classic Series Faceplates



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
CFP1	C061X030FJJ	C061X030YPT	C061X030FJC	T031X000FJC-BK
CFP2	C125X030FJJ	C125X030YPT	C125X030FJC	T031X000FJC-BK
CFP4				
CFPH2				
CFPH4	C252X030FJJ	C252X030YPT	C252X030FJC	T031X000FJC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

MINI-COM® Classic Series Faceplate Kits

- Accept MINI-COM® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Inserts are front releasable
- Optional adhesive labels available


CFPS4


CFPF12**-2G

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CFPS4IW	Single gang, vertical faceplate frame and two sloped inserts (two module spaces each). Accepts four MINI-COM® Modules.	Off White	1	10
CFPF12IW-2G	Double gang, vertical faceplate frame and six flat inserts (two module spaces each). Accepts twelve MINI-COM® Modules.	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), or IG (International Gray).
All faceplates supplied with mounting screws.

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Component Labels for *MINI-COM*® Classic Series Faceplate Kits



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
CFPS4	C125X030FJJ	C125X030YPT	C125X030FJC	T031X000FJC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

MINI-COM® *ULTIMATE ID*® Executive Series Faceplates

- *Ultimate ID*® components are part of a complete system for identification designed to efficiently support TIA/EIA-606-A standard labeling requirements; reference page A1.6 for a complete system overview
- Accept *MINI-COM*® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Raised rail design for aesthetic appeal
- Supplied with color coordinated screw cover and clear station and port label covers, labels sold separately
- Can be clearly identified with the *PANTHER*™ LS8E or *COUGAR*™ LS9 Hand-Held Thermal Transfer Printers
- Non-adhesive computer printable label sheets for desktop printers and write-on labels available
- Replacement screw covers and label covers available
- Optional screw kit required for junction box mounting (JB*)
- Optional icons available



UICFPSE2 UICFPSE4 UICFPSE6



UICFPSE8**-2G



UICFPHSE2 UICFPHSE4

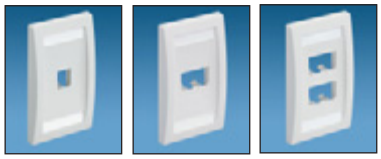
Part Number	Part Description	Color‡	Labels Required*	Std. Pkg. Qty.	Std. Ctn. Qty.
UICFPSE2IW	Single gang, vertical sloped faceplate holds up to two *MINI-COM*® Modules.	Off White	One 1-Port One 2-Port	1	10
UICFPSE4IW	Single gang, vertical sloped faceplate holds up to four *MINI-COM*® Modules.	Off White	One 1-Port Two 2-Port	1	10
UICFPSE6IW	Single gang, vertical sloped faceplate holds up to six *MINI-COM*® Modules. Requires min. 1.9" wide in-wall box or wallboard adapter for proper installation.	Off White	One 1-Port Two 3-Port	1	10
UICFPSE8IW-2G	Double gang, vertical faceplate holds up to eight *MINI-COM*® Modules.	Off White	Four 4-Port	1	10
UICFPHSE2IW	Single gang, horizontal sloped faceplate holds up to two *MINI-COM*® Modules.	Off White	One 1-Port One 2-Port	1	10
UICFPHSE4IW	Single gang, horizontal sloped faceplate holds up to four *MINI-COM*® Modules.	Off White	One 1-Port One 4-Port	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).
All faceplates supplied with mounting screws.
**ULTIMATE ID*® Labels can be found on page F1.8.

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MINI-COM® Executive Series Faceplates

- Accept *MINI-COM*® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Include label/label covers for easy port identification
- Raised rail design for aesthetic appeal


CFPE1**Y CFPE2**Y CFPE4**Y


CFPE6**Y CFPE10**-2GY

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CFPE1IWY	Single gang, vertical faceplate accepts one *MINI-COM*® Module.	Off White	1	10
CFPE2IWY	Single gang, vertical faceplate accepts two *MINI-COM*® Modules.	Off White	1	10
CFPE4IWY	Single gang, vertical faceplate accepts four *MINI-COM*® Modules.	Off White	1	10
CFPE6IWY	Single gang, vertical faceplate accepts six *MINI-COM*® Modules. Requires minimum 1.9" wide electrical box for proper mounting.	Off White	1	10
CFPE10IW-2GY	Double gang, vertical faceplate accepts ten *MINI-COM*® Modules.	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), or IG (International Gray).
All faceplates supplied with mounting screws.

Component Labels for *MINI-COM*® Executive Series Faceplates



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
CFPE1**Y	C195X040Y1J	C195X040Y1T	C195X040Y1C	T038X000FJC-BK‡
CFPE2**Y				
CFPE4**Y				
CFPE6**Y				
CFPE10**-2GY	C288X040Y1J	C288X040Y1T	C288X040Y1C	T038X000FJC-BK‡

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For non-adhesive labeling solution, do not remove liner from label.

MINI-COM® Sloped Executive Series Faceplate Kit

- Accepts *MINI-COM*® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Sloped inserts are front releasable
- Includes label/label covers for easy port identification
- Raised rail design for aesthetic appeal



Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CFPSE4IWY	Single gang, vertical faceplate frame and two sloped inserts (two module spaces each). Accepts four *MINI-COM*® Modules.	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), or IG (International Gray).
All faceplates supplied with mounting screws.

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Component Labels for *MINI-COM*® Sloped Executive Series Faceplate Kit



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
CFPSE4**Y	C195X040Y1J	C195X040Y1T	C195X040Y1C	T038X000FJC-BK‡

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For non-adhesive labeling solution, do not remove liner from label.

NEW! *MINI-COM*® Executive Series Faceplate Kits with Jack Modules

- Accept *MINI-COM*® Category 6 (CJ688TG), Category 5e (CJ5E88TG), or Category 3 (CJ66U) Modules, which snap in and out for easy moves, adds, and changes
- Convenience of having a faceplate with all the components to complete the outlet, in one package



CFKE2



CFKE4

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
Two Module Space Single Gang Faceplate Kit				
CFKE2A5U5J	Includes 2-port executive faceplate with two *MINI-COM*® Category 5e Jack Modules (BU, OR).	Off White	1	10
CFKE2A6U6J	Includes 2-port executive faceplate with two *MINI-COM*® Category 6 Jack Modules (BU, OR).	Off White	1	10
CFKE2A5U3A	Includes 2-port executive faceplate with one *MINI-COM*® Category 5e Jack Module (BU) and one *MINI-COM*® Category 3 Jack Module (IW).	Off White	1	10
CFKE2A6U3A	Includes 2-port executive faceplate with one *MINI-COM*® Category 6 Jack Module (BU) and one *MINI-COM*® Category 3 Jack Module (IW).	Off White	1	10
CFKE2F5U5J	Includes 2-port executive faceplate with two *MINI-COM*® Category 5e Jack Modules (BU, OR).	Electric Ivory	1	10
CFKE2F6U6J	Includes 2-port executive faceplate with two *MINI-COM*® Category 6 Jack Modules (BU, OR).	Electric Ivory	1	10
CFKE2F5U3F	Includes 2-port executive faceplate with one *MINI-COM*® Category 5e Jack Module (BU) and one *MINI-COM*® Category 3 Jack Module (EI).	Electric Ivory	1	10
CFKE2F6U3F	Includes 2-port executive faceplate with one *MINI-COM*® Category 6 Jack Module (BU) and one *MINI-COM*® Category 3 Jack Module (EI).	Electric Ivory	1	10
Four Module Space Single Gang Faceplate Kit with Blanks				
CFKE4A5U5J3AMA	Includes 4-port executive faceplate with two *MINI-COM*® Category 5e Jack Modules (BU, OR), one *MINI-COM*® Category 3 Jack Module (IW) and a blank.	Off White	1	10
CFKE4A6U6J5AMA	Includes 4-port executive faceplate with two *MINI-COM*® Category 6 Jack Modules (BU, OR), one *MINI-COM*® Category 5e Jack Module (IW) and a blank.	Off White	1	10
CFKE4F5U5J3FMF	Includes 4-port executive faceplate with two *MINI-COM*® Category 5e Jack Modules (BU, OR), one *MINI-COM*® Category 3 Jack Module (EI) and a blank.	Electric Ivory	1	10
CFKE4F6U6J5FMF	Includes 4-port executive faceplate with two *MINI-COM*® Category 6 Jack Modules (BU, OR), one *MINI-COM*® Category 5e Jack Module (EI) and a blank.	Electric Ivory	1	10

‡Faceplate colors IW (Off White) or EI (Electric Ivory).
Jack Module colors BU (Blue), OR (Orange), IW (Off White), EI (Electric Ivory).
Blank matches color of faceplate.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Component Labels for *Mini-Com*® Executive Series Faceplate Kits with Jack Modules



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Inkjet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PanTher*™ LS8E Hand-Held Printer Label	*Cougar*™ LS9 Hand Held Printer Label
CFKE2*	C195X040Y1J	C195X040Y1T	C195X040Y1C	T038X000FJC-BK‡
CFKE4*				

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For non-adhesive labeling solution, do not remove liner from label.

Mini-Com® *Ultimate ID*® Tamper Resistant Faceplate Kit

- *Ultimate ID*® components are part of a complete system for identification designed to efficiently support TIA/EIA-606-A standard labeling requirements
- Includes tamper resistant screw to prevent unauthorized access to the connections
- Front accessible inserts are recessed and provide a 30° slope to provide proper bend radius control
- Requires minimum in-wall box depth of 2.125"
- Accepts *Mini-Com*® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Supplied with color coordinated screw cover
- Can be clearly identified with the *PanTher*™ LS8E or *Cougar*™ LS9 Hand-Held Thermal Transfer Printers
- Non-adhesive computer printable label sheets for desktop printers and write-on labels available
- Replacement screw covers and label covers available
- Optional icons available





Part Number	Part Description	Color‡	Labels Required*	Std. Pkg. Qty.	Std. Ctn. Qty.
UICFPRTR4IW	Tamper resistant faceplate kit includes faceplate frame, two recessed modular inserts, faceplate cover with additional outlet station identifier and tamper resistant screw. Holds up to four *Mini-Com*® Modules.	Off White	One 1-Port Two 2-Port	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory) or WH (White).
All faceplates supplied with mounting screws.
1/16" hex key required for installation of tamper resistant screw.
**Ultimate ID*® Labels can be found on page F1.8.

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MINI-COM® Tamper Resistant Faceplates

- Include two tamper resistant screws to prevent unauthorized access to the connections (combo head screws also included)
- Sloped design improves bend radius control
- Made of impact resistant material
- Optional icons available
- Two-piece hinged design
- Mount to single gang opening
- Accept MINI-COM® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- CFPTR2B provides two tamper resistant and two external accessible ports



CFPTR4



CFPTR2B

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CFPTR4IW	Single gang, vertical tamper resistant faceplate accepts four MINI-COM® Modules. Dimensions 5.8"H x 3.1"W x 1.5"D (147.32mm x 78.74mm x 38.10mm).	Off White	1	10
CFPTR2BEI	Single gang, vertical tamper resistant faceplate with two encased sloped ports and two accessible breakout ports in the base; accepts up to four MINI-COM® Modules . Dimensions 5.8"H x 3.1"W x 1.5"D (147.32mm x 78.74mm x 38.10mm).	Electric Ivory	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray), BL (Black), CIG (International Gray base with Clear cover) or CL (Clear base and cover).
All faceplates supplied with mounting screws.
Fiber modules are not recommended for use in bottom two module spaces due to bend radius control requirements.

Component Labels for MINI-COM® Tamper Resistant Faceplates



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
All CFPTR Parts	**C125X030FJJ**	**C125X030YPT**	**C125X030FJC**	**T031X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® Water Resistant Faceplate

- Includes unique gaskets that prevent water from entering and damaging connections
- Meets the level of protection required for an IP56 enclosure
- Sloped design improves bend radius control
- Made of impact resistant material
- Optional icons available
- Two-piece hinged design
- Mounts to single gang opening
- Includes combo head screws to secure cover to base (tamper resistant screws also included)
- Accepts *MINI-COM*® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes



Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CFPWR4CIG	Single gang, vertical water resistant faceplate accepts four *MINI-COM*® Modules. Dimensions 5.8"H x 3.1"W x 1.5"D (147.32mm x 78.74mm x 38.10mm).	International Gray Base and Clear Cover	1	10

‡For other colors replace suffix CIG (International Gray base with Clear cover) with IG (International Gray) or CL (Clear base and cover).
All faceplates supplied with mounting screws.
Fiber modules are not recommended for use in bottom two module spaces due to bend radius control requirements.

Component Labels for *MINI-COM*® Water Resistant Faceplate



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER*™ LS8E Hand-Held Printer Label**	***COUGAR*™ LS9 Hand-Held Printer Label**
CFPWR4CIG	**C125X030FJJ**	**C125X030YPT**	**C125X030FJC**	**T031X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

NEW! *MINI-COM*® *ULTIMATE ID*® Stainless Steel Faceplates

- *ULTIMATE ID*® components are part of a complete system for identification designed to efficiently support TIA/EIA-606-A standard labeling requirements
- Accept *MINI-COM*® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Raised rail design for aesthetic appeal
- Supplied with coordinated screw cover and clear station and port label covers, labels sold separately
- Impact resistant 304 stainless steel suitable for light industrial environments

ULTIMATE ID



UICFP2S



UICFP4S



UICFP6S

Part Number	Part Description	Labels Required*	Std. Pkg. Qty.	Std. Ctn. Qty.
UICFP2S	Single gang, vertical sloped faceplate holds up to two *MINI-COM*® Modules.	One 1-Port One 2-Port	1	10
UICFP4S	Single gang, vertical sloped faceplate holds up to four *MINI-COM*® Modules.	One 1-Port Two 2-Port	1	10
UICFP6S	Single gang, vertical sloped faceplate holds up to six *MINI-COM*® Modules. Requires min. 1.9" wide in wall box or wallboard adapter for proper installation.	One 1-Port Two 3-Port	1	10

All faceplate supplied with mounting screws
**ULTIMATE ID*® Labels can be found on page F1.8.*

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MINI-COM® Stainless Steel Faceplates with Labels

- Accept MINI-COM® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Include label/label covers for easy port identification; replacement label/label covers available
- Impact resistant 304 stainless steel suitable for light industrial environments


CFPL2SY


CFPL4SY


CFPL6SY


CFPL4S-2GY


CFPL6S-2GY


CFPL8S-2GY


CFPL10S-2GY

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
CFPL2SY	Single gang, vertical faceplate accepts two MINI-COM® Modules.	1	10
CFPL4SY	Single gang, vertical faceplate accepts four MINI-COM® Modules. Requires minimum 1.9" wide electrical box for proper mounting.	1	10
CFPL6SY	Single gang, vertical faceplate accepts six MINI-COM® Modules. Requires minimum 1.9" wide electrical box for proper mounting.	1	10
CFPL4S-2GY	Double gang, vertical faceplate accepts four MINI-COM® Modules.	1	10
CFPL6S-2GY	Single gang, vertical faceplate accepts six MINI-COM® Modules. Requires minimum 1.9" wide electrical box for proper mounting.	1	10
CFPL8S-2GY	Double gang, vertical faceplate accepts eight MINI-COM® Modules.	1	10
CFPL10S-2GY	Double gang, vertical faceplate accepts ten MINI-COM® Modules.	1	10

All faceplates include mounting screws.

Component Labels for MINI-COM® Stainless Steel Faceplates with Labels



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
CFPL2SY	C195X040Y1J	C195X040Y1T	C195X040Y1C	T038X000FJC-BK‡
CFPL4SY				
CFPL6SY				
CFPL4S-2GY	C288X040Y1J	C288X040Y1T	C288X040Y1C	T038X000FJC-BK‡
CFPL6S-2GY				
CFPL8S-2GY				
CFPL10S-2GY				

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For non-adhesive labeling solution, do not remove liner from label.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® Stainless Steel Faceplates

- Accept MINI-COM® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Optional adhesive labels available
- Impact resistant 304 stainless steel suitable for light industrial environments


CFP2SY


CFP4SY


CFP6SY


CFP4S-2GY


CFP8S-2GY


CFP10S-2GY

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
CFP2SY	Single gang, vertical faceplate accepts two MINI-COM® Modules.	1	10
CFP4SY	Single gang, vertical faceplate accepts four MINI-COM® Modules. Requires minimum 1.9" wide electrical box for proper mounting.	1	10
CFP6SY	Single gang, vertical faceplate accepts six MINI-COM® Modules. Requires minimum 1.9" wide electrical box for proper mounting.	1	10
CFP4S-2GY	Double gang, vertical faceplate accepts four MINI-COM® Modules.	1	10
CFP8S-2GY	Double gang, vertical faceplate accepts eight MINI-COM® Modules.	1	10
CFP10S-2GY	Double gang, vertical faceplate accepts ten MINI-COM® Modules.	1	10

All faceplates include mounting screws.

Component Labels for MINI-COM® Stainless Steel Faceplates



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
CFP2SY	C061X030FJJ	C061X030YPT	C061X030FJC	T031X000FJC-BK
CFP4SY				
CFP4S-2GY				
CFP6SY	C188X030FJJ	C188X030YPT	C188X030FJC	T031X000FJC-BK
CFP8S-2GY	C125X030FJJ	C125X030YPT	C125X030FJC	T031X000FJC-BK
CFP10S-2GY	C315X030FJJ	C315X030YPT	C315X030FJC	T031X000FJC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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MINI-COM® Classic and Executive Faceplate Frames

- Accept inserts which snap in and out of faceplate frames
- All inserts are front releasable
- Allow custom installations with your choice of inserts
- Optional adhesive labels available
- Executive faceplates frames have raised rail design for aesthetic appeal


CB


CB**-2G


CBE**Y


CBE**-2GY

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
Classic Faceplate Frames				
CBIW	Single gang faceplate frame accepts two 1/2 size module inserts or three 1/3 size module inserts.	Off White	1	10
CBIW-2G	Double gang faceplate frame accepts up to four 1/2 size module inserts or six 1/3 size module inserts.	Off White	1	10
Executive Faceplate Frames				
CBEIWY	Single gang faceplate frame accepts up to two 1/2 size module inserts or three 1/3 size module inserts. Supplied with labels and label cover/screw covers.	Off White	1	10
CBEIW-2GY	Double gang faceplate frame which accepts up to four 1/2 size module inserts or six 1/3 size module inserts. Supplied with labels and label cover/screw covers.	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).
All faceplate frames supplied with mounting screws.
Inserts found on page B3.15.

Component Labels for MINI-COM® Classic and Executive Faceplate Frames



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Frame Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
CBEY**	**C125X030FJJ**	**C125X030YPT**	**C125X030FJC**	**T031X000FJC-BK**
CBE-2GY**	**C379X030FJJ**	**C379X030YPT**	**C379X030FJC**	**T031X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

MINI-COM® Inserts

- Compatible with classic and executive faceplate frames
- Front releasable
- Accept MINI-COM® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes


CHS2


CHS2S


CHF2


CHSRE2


CHS1S


CHB2


CHF2M


CHB2M

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CHS2IW-X	Two module space, 1/2 size, sloped insert accepts two MINI-COM® Modules.	Off White	10	50
CHS2SIW-X	Two module space, 1/2 size, sloped shuttered insert accepts two MINI-COM® Modules. Shutters are spring loaded and rotate out of the way for cable connections. Not suitable for use with any audio/video or fiber connector module that protrudes beyond the face of the insert.	Off White	10	50
CHF2IW-X	Two module space, 1/2 size, flat insert accepts two MINI-COM® Modules.	Off White	10	50
CHSRE2IW-X	Two module space, 1/2 size, 30° sloped recessed insert accepts two MINI-COM® Modules.	Off White	10	50
CHS1SIW-X	One module space, 1/2 size, sloped shuttered insert accepts one MINI-COM® Modules. Not suitable for use with any audio/video or fiber connector module that protrudes beyond the face of the insert.	Off White	10	50
CHB2IW-X	1/2 blank insert. Reserves space for future upgrades.	Off White	10	50
CHF2MIW-X	Two module space, 1/3 size, flat insert accepts two MINI-COM® Modules.	Off White	10	50
CHB2MIW-X	1/3 blank insert. Reserves space for future upgrades.	Off White	10	50

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).

Component Labels for MINI-COM® Inserts



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Insert Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	**PANTHER™ LS8E Hand-Held Printer Label**	**COUGAR™ LS9 Hand-Held Printer Label**
CHS2	**C125X030FJJ**	**C125X030YPT**	**C125X030FJC**	**T031X000FJC-BK**
CHS2S				
CHSRE2				
CHS1S	**C061X030FJJ**	**C061X030YPT**	**C061X030FJC**	**T031X000FJC-BK**
CHF2	**C125X030FJJ**	**C125X030YPT**	**C125X030FJC**	**T031X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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D-Subminiature Inserts

- Used in audio and video applications
- Compatible with classic and executive faceplate frames



CHD9C**Y



CHD15HDC**Y



CHD15HDSC**Y

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CHD9CIWY	1/3 insert with 9-pin female to female coupler.	Off White	1	10
CHD15HDCIWY	1/3 insert with 15-pin high-density female to female coupler; SVGA capable.	Off White	1	10
CHD15HDSCIWY	1/3 insert with one 15-pin DB connector mounted to a printed circuit board; terminates on site; SVGA capable.	Off White	1	10

‡For other colors, replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).

Component Labels for D-Subminiature Inserts



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
CHD9C**Y	C125X030FJJ	C125X030YPT	C125X030FJC	T031X000FJC-BK
CHD15HDC**Y				
CHD15HDSC**Y				

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

RCA 1/3 Inserts

- Used in audio and video applications
- Compatible with classic and executive faceplate frames



CHR3RGB

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CHR3RGBIW	1/3 insert with three RCA pass-through couplers. RCA insert colors are red, green, and blue. R, G, B component video.	Off White	1	10
CHR3WYRIW	1/3 insert with three RCA pass-through couplers. RCA insert colors are white, yellow and red. Composite video and left and right stereo.	Off White	1	10

‡For other colors, replace suffix IW (Off White) with EI (Electric Ivory), WH (White), or IG (International Gray).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® In-Wall Fiber Spool

- Maintains 1" internal bend radius
- Cable entry/exit from rear, top, and bottom helps maintain external bend radius
- Designed for use with single or double gang wall board adapter
- Stores up to 12m of unjacketed fiber cable or 2m of jacketed fiber cable
- 3.65" (92.7mm) depth from rear of faceplate, not for use with in-wall boxes or in shallow walls



Standards: TIA/EIA-568-B requires a minimum 1m slack and a fiber spool for in-wall installations.

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CFS2IW	In-wall fiber spool for use with *MINI-COM*® Faceplates, Faceplate Frames, Inserts and Modular Patch Panels.	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).

MINI-COM® "GFCI" Decora Module Frames

- Mount behind any standard GFCI electrical faceplate
- Accept *MINI-COM*® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Optional adhesive labels available



CFG1



CFG2



CFG4

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CFG1IW	Module frame accepts one *MINI-COM*® Module.	Off White	1	10
CFG2IW	Module frame accepts two *MINI-COM*® Modules.	Off White	1	10
CFG4IW	Module frame accepts four *MINI-COM*® Modules.	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).
All frames include mounting screws.

Component Labels for *MINI-COM*® "GFCI" Decora Module Frames



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Frame Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER*™ LS8E Hand-Held Printer Label**	***COUGAR*™ LS9 Hand-Held Printer Label**
CFG1	**C061X030FJJ**	**C061X030YPT**	**C061X030FJC**	**T031X000FJC-BK**
CFG2				
CFG4	**C125X030FJJ**	**C125X030YPT**	**C125X030FJC**	**T031X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

MINI-COM® 106 Duplex Module Frames

- Mount behind standard 106 NEMA faceplates
- Accept MINI-COM® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves adds, and changes



CF1062**Y



CF1064**Y

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CF1062IWY	Module frame accepts two MINI-COM® Modules.	Off White	1	10
CF1064IWY	Module frame accepts four MINI-COM® Modules.	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).
All frames supplied with mounting screws.

Phone Plate with Module

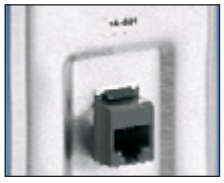
- Stainless steel construction
- Includes mounting studs on plate which are positioned to mount standard wall mount telephones with keystone adaptation flush to wall surface



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
KWP5EY	Stainless steel phone plate with GIGA-TX™ Style Category 5e Keystone Jack Module.	1	10
KWP6PY	Stainless steel phone plate with GIGA-TX™ Style Category 6 Keystone Jack Module.	1	10

Contact technical support to verify mounting holes when using IP or console type telephones.
All faceplates supplied with mounting screws.
Wall mount faceplate kits above only accept wall mountable phones with short patch cord connections to the jack module.

Component Labels for Phone Plate with Modules



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Phone Plate Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	**PANTHER™ LS8E Hand-Held Printer Label**	**COUGAR™ LS9 Hand-Held Printer Label**
All KWP parts	**C061X030FJJ**	**C061X030YPT**	**C061X030FJC**	**T031X000FJC-BK**

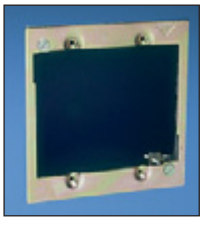
For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Wall Board Adapters

- Provide a mounting surface for single or double gang faceplates



MWBA1



MWBA-2G

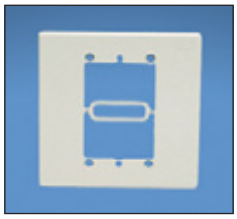
Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
MWBA1	An alternative for single gang in-wall box in communication applications. Mounting hole spacing of 3.28" (83.5mm).	1	10
MWBA-2G	An alternative for double gang in-wall boxes in communication applications. Mounting hole spacing of 3.28" (83.5mm).	1	10

Adapters supplied with mounting screws.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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In-Wall Box Adapters

- Allow horizontal or vertical mounting



Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
MIWBAIW	Allows mounting of *MINI-COM*® Single Gang Faceplates and Surface Mount Boxes to double gang in-wall boxes and box eliminators.	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).
Adapters supplied with mounting screws.

Tombstone Floor Box Adapter Plate

- Allows *MINI-COM*® Snap-On Modular Furniture Faceplates to be mounted to Walker* floor box
- Faceplate opening accepts *PANDUIT* CFFPL4, CFFP4 and CFFPE3 snap-on modular furniture faceplates



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
MSP500W	Stainless steel adapter plate mounts to WALKER* floor box service fitting (WALKER* part no. 525).	1	10

*WALKER is a trademark of the Wiremold Co.

MINI-COM® *ULTIMATE ID*® Modular Furniture Faceplate

- *ULTIMATE ID*® components are part of a complete system for identification designed to efficiently support TIA/EIA-606-A standard labeling requirements; reference page A1.6 for a complete system overview
- Accepts *MINI-COM*® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Supplied with clear station and port label covers, labels sold separately
- Can be clearly identified with the *PANTHER*™ LS8E or *COUGAR*™ LS9 Hand-Held Thermal Transfer Printers
- Computer printable label sheets for desktop printers and write-on labels available
- Replacement label covers available
- Optional icons available
- Fits standard furniture openings

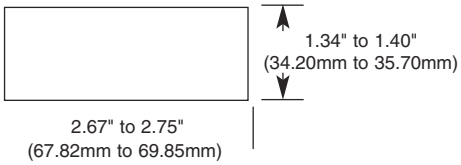
ULTIMATE ID



Part Number	Part Description	Color‡	Labels Required*	Std. Pkg. Qty.	Std. Ctn. Qty.
UICFFP4BL	Faceplate snaps into standard knockouts found on modular furniture. Holds up to four *MINI-COM*® Modules. See panel cutout requirement.	Black	One 1-Port One 4-Port	1	10

‡For other colors replace suffix BL (Black) with EI (Electric Ivory), IG (International Gray), or IW (Off White).
**ULTIMATE ID*® Labels can be found on page F1.8.

Panel Cutout Requirement



Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

MINI-COM® Snap-On Modular Furniture Faceplates

- Accept MINI-COM® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Optional adhesive labels available
- Select faceplates feature label/label covers for easy port identification



CFFPL4 CFFP4



MFFPE CFFPA2



CFFPE3 CFFPLA4

Panel Cutout Requirements for CFFPL4, CFFP4, MFFPE, CFFPA2, CFFPE3 and CFFPLA4

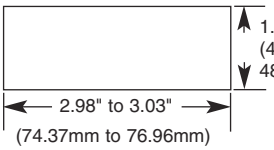


Maximum Panel Thickness: .09" (2.29mm)



CFFPHM4

Panel Cutout Requirements for CFFPHM4



Maximum Panel Thickness: .09" (2.29mm)

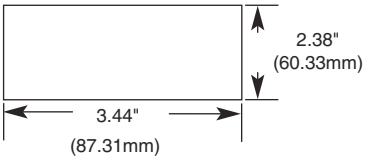


CFFPEBSL4

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
Four Module Space Modular Furniture Snap-On Faceplate with Labels				
CFFPL4BL	Faceplate snaps into industry standard knockouts found on modular furniture. Accepts up to four MINI-COM® Modules. Supplied with write-on label and label cover.	Black	1	10
Four Module Space Modular Furniture Snap-On Faceplate				
CFFP4BL	Faceplate snaps into industry standard knockouts found on modular furniture. Accepts up to four MINI-COM® Modules.	Black	1	10
Snap-On Modular Furniture Faceplate Extender				
MFFPEBL	For use when depth inside modular furniture base is limited. Extends plate approximately 1/2" (12.7mm). Accepts CFFPL4 and CFFP4 modular faceplates.	Black	1	10
Two Module Space Angled Modular Furniture Snap-On Faceplate				
CFFPA2BL	Angled faceplate snaps into industry standard knockouts found on modular furniture. Accepts up to two MINI-COM® Modules.	Black	1	10
Three Module Space Extended Furniture Snap-On Faceplate				
CFFPE3BL	Faceplate snaps into knockouts found on KNOLL* MORRISON* furniture as well as industry standard knockouts. Accepts up to three MINI-COM® Modules.	Black	1	10
Four Module Space Angled Modular Furniture Snap-On Faceplate with Labels				
CFFPLA4BL	Angled faceplate snaps into industry standard knockouts found on modular furniture. Accepts up to four MINI-COM® Modules. Supplied with write-on label and label cover.	Black	1	10
Four Module Space HERMAN MILLER▪ Furniture Snap-On Faceplate				
CFFPHM4BL	Faceplate snaps into knockouts found on HERMAN MILLER▪ furniture such as Action Office Series 2 and 3 and Ethospace Baseline. Accepts up to four MINI-COM® Modules.	Black	1	10
Four Module Space HERMAN MILLER▪ Ethospace Beltline Furniture Snap-On Faceplate				
CFFPEBSL4BL	Sloped faceplate snaps into knockouts found on HERMAN MILLER▪ furniture such as Ethospace Beltline. Accepts up to four MINI-COM® Modules. Supplied with write-on label and label cover and icon slots.	Black	1	10
Three Module Space KNOLL EQUITY* Furniture Snap-On Faceplate				
CFFPKE3BL	Faceplate snaps into knockouts found on KNOLL EQUITY* furniture. Accepts up to three MINI-COM® Modules	Black	1	10
Replacement Labels for MINI-COM® Snap-On Modular Furniture Faceplates				
C4PPLK	Replacement label/label cover kit for MINI-COM® Modular Patch Panels with Labels (CPPL24WBLY, CPPL48WBLY, CPPL24WRBLY, CPPL48WRBLY) and MINI-COM® Modular Furniture Faceplates with Labels (CFFPL4, CFPHSL4, CFFPEBSL4). Each kit contains six labels and six clear label covers per bag.	—	1	10

‡For other colors replace suffix BL (Black) with EI (Electric Ivory), IG (International Gray), or IW (Off White). Can be clearly identified with labels, reference chart on page B3.21.

Panel Cutout Requirements for CFFPEBSL4

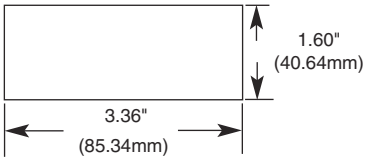


Maximum Panel Thickness: .05" (1.27mm)



CFFPKE3

Panel Cutout Requirements for CFFPKE3



Maximum Panel Thickness: .040" (1.02mm)



C4PPLK

▪HERMAN MILLER is a trademark of Herman Miller, Inc., Zeeland, MI.

*KNOLL, MORRISON, EQUITY are registered trademarks of Knoll, Inc.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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Component Labels for *MINI-COM*® Snap-On Modular Furniture Faceplates



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
CFFPE3	C061X030FJJ	C061X030YPT	C061X030FJC	T031X000FJC-BK
CFFPKE3				
CFFP4	C125X030FJJ	C125X030YPT	C125X030FJC	T031X000FJC-BK
CFFPA2				
CFFPHM4				
CFFPL4	C261X035Y1J	C261X035Y1T	C261X035Y1C	T031X000FJC-BK
CFFPLA4				
CFFPEBSL4				

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

MINI-COM® Round Faceplates

- Accept *MINI-COM*® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Optional adhesive labels available



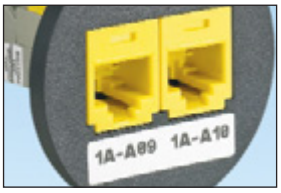
CRFPA2



CFFPR1

Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
CRFPA2BL	Two module space, 2" round in-floor outlet adapter.	Black	1	10
CFFPR1BL-X	One module space, 1.57" round furniture faceplate with screw.	Black	1	10

Component Labels for Round Faceplates



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
CRFPA2BL	C125X030FJJ	C125X030YPT	C125X030FJC	T031X000FJC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

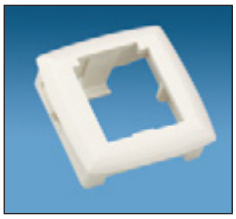
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MINI-COM® One-Position Adapters

- Accept MINI-COM® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Allow a single module to be mounted in a discrete location (cart, wall, furniture or flat panel)
- Snap into plastic or metal opening (size identified in part description)



CMNZA



CMAA1

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CMNZABL-X	Adapter snaps into .827" x .827" (21mm x 21mm) opening and accepts one MINI-COM® Module. For snug fit, panel thickness shall be .046" to .056".	Black	10	50
CMAA1IW-X	Adapter snaps into 1" x 1" (25mm x 25mm) opening and accepts one MINI-COM® Module. For snug fit, panel thickness shall be .06" to .08".	Off White	10	100

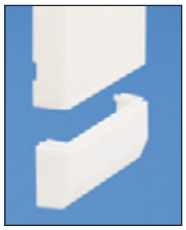
‡For other colors substitute suffix IW (Off White) or WH (White).

MINI-COM® ULTIMATE ID® Hybrid Box

- ULTIMATE ID® components are part of a complete system for identification designed to efficiently support TIA/EIA-606-A standard labeling requirements and TIA/EIA-568B MuTOA requirements; reference page A1.6 for a complete system overview
- Accepts MINI-COM® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Provides independent access to copper and fiber optic connections
- Mounts to single gang, double gang, or DIN opening
- A retention block snaps to the base and accepts any single gang faceplate (up to six ports)
- Base accepts up to six MINI-COM® Fiber Optic Modules
- Manages up to 12m of buffered fiber optic cable that is secured in place by cable tie mounting loops
- Cover snaps to base and is secured with a screw; includes a 6-position ULTIMATE ID® Label Pocket to identify fiber optic connections; a clear screw cover is included for station identification
- Can be clearly identified with the PANTHER™ LS8E or COUGAR™ LS9 Hand-Held Thermal Transfer Printers
- Non-adhesive computer printable label sheets for desktop printers and write-on labels available
- Optional cover extension provides additional security of fiber connections
- Heat shrink tubing included



UICBXH6



UICBXHEC



Part Number	Part Description	Color‡	Labels Required*	Used with PAN-WAY® Raceway	Std. Pkg. Qty.	Std. Ctn. Qty.
UICBXH6IW-A	Hybrid box with cover accepts up to six MINI-COM® Modules in a single gang MINI-COM® Faceplate, and up to six MINI-COM® Fiber Optic Modules in the base.	Off White	One 1-Port One 6-Port	LD3, LD5	1	10
UICBXHC6IW-A	Hybrid box with cover and cover extension accepts up to six MINI-COM® Modules in a single gang MINI-COM® Faceplate, and up to six MINI-COM® Fiber Optic Modules in the base.	Off White	One 1-Port One 6-Port	LD3, LD5	1	10
UICBXHECIW	Cover extension for hybrid box.	Off White	—	—	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory) or WH (White).
*ULTIMATE ID® Labels can be found on page F1.8.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® ULTIMATE ID® Surface Mount Boxes

- ULTIMATE ID® components are part of a complete system for identification designed to efficiently support TIA/EIA-606-A standard labeling requirements; reference page A1.6 for a complete system overview
- Accept MINI-COM® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Supplied with color coordinated screw cover and clear station and port label covers, labels sold separately
- 4-port box includes adjustable mounting tabs that enable a range of modular furniture partitions to be used for mounting the box, maximum panel thickness .08"
- Can be clearly identified with PANTHER™ LS8E or COUGAR™ LS9 Hand-Held Thermal Transfer Printers
- Non-adhesive computer printable label sheets for desktop printers and write-on labels available
- Replacement screw covers and label covers available
- Optional Icons available
- Custom mounting screws included
- Mount easily with supplied mounting screws, adhesive tape or optional magnet pocket (CSBM-X)



UICBX2



UICBX4

Part Number	Part Description	Color‡	Labels Required*	Used with PAN-WAY® Raceway	Std. Pkg. Qty.	Std. Ctn. Qty.
UICBX2IW-A	Surface mount box accepts two MINI-COM® Modules. Dimensions: 1.06"H x 1.95"W x 3.65"L (26.92mm x 49.53mm x 92.71mm)	Off White	One 1-Port One 2-Port	LD3	1	10
UICBX4IW-A	Surface mount box accepts four MINI-COM® Modules. Dimensions: 1.06"H x 3.69"W x 4.59"L (26.92mm x 93.73mm x 116.59mm)	Off White	One 1-Port One 4-Port	LD3, LD5	1	10

‡For other colors replace suffix IW (Off White) with IG (International Gray), WH (White) or EI (Electric Ivory).
*ULTIMATE ID® Labels can be found on page F1.8.

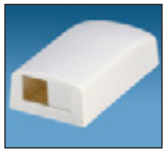
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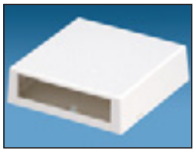
MINI-COM® Surface Mount Boxes

- Accept MINI-COM® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Mount easily with supplied mounting screws, adhesive tape or optional magnet (CBM-X)
- Cable entry from side and rear knockouts and from opening in center of base
- CBXJ2 and CBX2 include built-in removable blank to add a second module
- Optional adhesive labels available

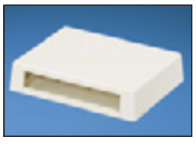

CBX1**-A

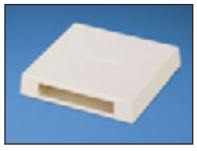

CBXJ2**-A


CBX2**-AY


CBXC4**-A


CBX4**-AY


CBXD6**-AY


CBX12**-AY

Part Number	Part Description	Color‡	Used with PAN-WAY® Raceway	Std. Pkg. Qty.	Std. Ctn. Qty.
CBX1IW-A	Surface mount box accepts one MINI-COM® Module. Dimensions: .9"H x 1.01"W x 1.88"L (22.86mm x 25.65mm x 47.75mm). Rear knockout provides opening of .42"H x .26"W.	Off White	LD3, LDS3*, LDPH5	1	10
CBXJ2IW-A	Surface mount box accepts one or two MINI-COM® Modules; includes built-in removable blank to add a second module. Dimensions: .91"H x 1.77"W x 2.44"L (23.11mm x 44.96mm x 61.98mm). Knockout provides opening of .47"H x .36"W.	Off White	LD5, LDPH5*	1	10
CBX2IW-AY	Surface mount box accepts one or two MINI-COM® Modules; includes built-in removable blank to add a second module. Dimensions: 1.06"H x 1.95"W x 3.65"L (26.92mm x 49.53mm x 92.71mm).	Off White	LD3, LDPH3, LD5, LDPH5	1	10
CBXC4IW-A	Surface mount box accepts four MINI-COM® Modules. Dimensions: .91"H x 3.20"W x 3.20"L (23mm x 80mm x 80mm).	Off White	LDPH5	1	10
CBX4IW-AY	Surface mount box accepts four MINI-COM® Modules. Provides slots that accept cable ties for strain relief. Supplied with label holder/screw cover. Dimensions: 1.1"H x 2.9"W x 4.5"L (27.94mm x 73.66mm x 114.30mm).	Off White	LD3, LDPH3, LD5, LDPH5	1	10
CBXD6IW-AY	Surface mount box accepts six MINI-COM® Modules. Provides slots that accept cable ties for strain relief. Provides bend radius control. Supplied with label holder/screw cover. Dimensions: 1.04"H x 4.95"W x 3.79"L (26.42mm x 125.73mm x 96.27mm).	Off White	LD3, LD5, LD10	1	10
CBX12IW-AY	Surface mount box holds up to twelve MINI-COM® Modules six on each side. Supplied with mounting screws, adhesive backing and label holder/screw cover. Dimensions: 1.035"H x 5.71"W x 5.45"L (26mm x 145mm x 138mm).	Off White	LD5, LD10	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).
*Raceway does not enter box.
Surface mount boxes do not accept icons.

Component Labels for MINI-COM® Surface Mount Boxes



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Box Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
CBX1-A**	**C061X030FJJ**	**C061X030YPT**	**C061X030FJC**	**T031X000FJC-BK**
CBXJ2-A**	**C125X030FJJ**	**C125X030YPT**	**C125X030FJC**	
CBX2-AY**				
CBXC4-A**	**C252X030FJJ**	**C252X030YPT**	**C252X030FJC**	
CBX4-AY**				
CBXD6-AY**	**C379X030FJJ**	**C379X030YPT**	**C379X030FJC**	
CBX12-AY**				

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® Shuttered Surface Mount Boxes

- Accept MINI-COM® Modules for STP and UTP, FJ® Fiber Optic Jack Modules and other flush modules, which snap in and out for easy moves, adds, and changes
- Clear shuttered doors are spring-loaded to stay closed to prevent dust from entering module opening; doors can be collapsed to insert plug into module
- Cable entry from side, rear, and base knockouts
- Mount easily with supplied mounting screws, adhesive tape, or optional magnet (CSBM-X)
- Optional icons available
- Optional adhesive labels available


CBXS1**-A


CBXS2**-A


CBXS3**-AY


CBXS4**-AY


CBXS6**-AY


CBXSD6**-AY

Part Number	Part Description	Color‡	Used with PAN-WAY® Raceway	Std. Pkg. Qty.	Std. Ctn. Qty.
CBXS1IW-A	Shuttered surface mount box accepts one MINI-COM® Module. .62"H x 1.64"W x 2.47"L (15.75mm x 41.66mm x 62.73mm).	Off White	LD5/LDPH5*	1	10
CBXS2IW-A	Shuttered surface mount box accepts two MINI-COM® Modules. .94"H x 2.40"W x 2.5"L (23.88mm x 60.96mm x 63.50mm).	Off White	LD5/LDPH5*	1	10
CBXS3IW-AY	Shuttered surface mount box accepts three MINI-COM® Modules. .94"H x 3.62"W x 3.31"L (23.88mm x 92.00mm x 84.00mm).	Off White	LD5/LDPH5	1	10
CBXS4IW-AY	Shuttered surface mount box accepts four MINI-COM® Modules. .94"H x 4.65"W x 3.28"L (23.88mm x 118.11mm x 83.31mm).	Off White	LD3/LDPH3 LD5/LDPH5	1	10
CBXS6IW-AY	Shuttered surface mount box accepts six MINI-COM® Modules. .94"H x 6.7"W x 3.28"L (23.88mm x 170.18mm x 83.31mm).	Off White	LD3/LDPH3 LD5/LDPH5	1	10
CBXSD6IW-AY	Deep shuttered surface mount box accepts six MINI-COM® Modules (includes cable routing bridge). 1.16"H x 7.58"W x 3.86"L (29.60mm x 192.50mm x 98.00mm).	Off White	LD5/LDPH5 LD10/LDPH10	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).
*Raceway does not enter box.

Component Labels for MINI-COM® Shuttered Surface Mount Boxes



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Box Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
CBXS1**-A	C061X030FJJ	C061X030YPT	C061X030FJC	T031X000FJC-BK
CBXS2**-A				
CBXS3**-AY				
CBXS4**-AY				
CBXS6**-AY				
CBXSD6**-AY				

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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MINI-COM® ULTIMATE ID® Multi-Media/Fiber Surface Mount Box

- ULTIMATE ID® components are part of a complete system for identification designed to efficiently support TIA/EIA-606-A standard labeling requirements; reference page A1.6 for a complete system overview
- Accepts MINI-COM® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Features twelve ports, six on each side, angled to improve bend radius control
- Includes two knockouts which are compatible with *PANDUIT* LD5 and LD10 Raceway
- Mounts to single or double gang opening
- Mounts easily with supplied mounting screws, adhesive tape, or optional magnet (CSBM-X)
- Supplied with clear station and port label covers, labels sold separately
- Can be clearly identified with the PANTHER™ LS8E or COUGAR™ LS9 Hand-Held Thermal Transfer Printers
- Non-adhesive computer printable label sheets for desktop printers and write-on labels available
- Replacement label covers available
- Optional icons available

ULTIMATE ID

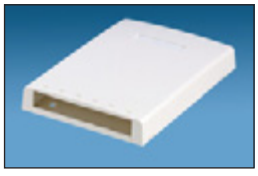


Part Number	Part Description	Color‡	Labels Required*	Std. Pkg. Qty.	Std. Ctn. Qty.
UICBXA12IW-A	12-port angled multi-media surface mount box accepts up to twelve MINI-COM® Modules and includes built-in figure eight spool to help manage fiber cable.	Off White	Two 4-Port Two 6-Port	1	10

‡ For other colors replace suffix IW (Off White) with EI (Electric Ivory) or WH (White).
All surface mount boxes supplied with mounting screws.
*ULTIMATE ID® Labels can be found on page F1.8.

MINI-COM® Multi-Media/Fiber Surface Mount Boxes

- Accept MINI-COM® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Mount easily with supplied mounting screws or adhesive tape
- Cable tie slots for improved cable management
- Tamper resistant screw for added security
- Unique built-in fiber spool design secures cable in place and stores up to 78.8' (24m) of buffered fiber optic cable
- Cable entry from side and rear knockouts and from opening in bottom of base
- Optional adhesive labels available
- Combination label/label cover for custom outlet identification



CBXF6-AY**



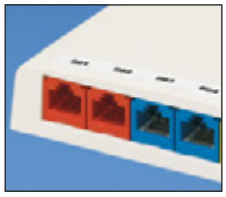
CBXF12-AY**

Part Number	Part Description	Color‡	Used with PAN-WAY® Raceway	Std. Pkg. Qty.	Std. Ctn. Qty.
CBXF6IW-AY	Surface mount box accepts up to six MINI-COM® Modules. Icons slots available for optional icons. .99"H x 4.71"W x 6.67"L (25mm x 120mm x 170mm).	Off White	LD3/LD5	1	10
CBXF12IW-AY	Surface mount box accepts up to twelve MINI-COM® Modules. 1.81"H x 4.71"W x 6.67"L (46mm x 120mm x 170mm).	Off White	LD3/LD5/LD10	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Component Labels for *MINI-COM*® Multi-Media/Fiber Surface Mount Boxes



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
CBXF**-AY	C379X030FJJ	C379X030YPT	C379X030FJC	T031X000FJC-BK
CBXF12**-AY				

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

MINI-COM® MuTOA 6-Port Outlet Box

- Accepts *MINI-COM*® Modules for STP and UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Mounts easily with adhesive tape or optional magnet (CSBM-X)
- Two pass-through holes allow surface mounting with screws (not included)
- Expandable cable opening will adjust to different cable bundle sizes
- Accepts up to three 1/2 sloped inserts (shuttered or non-shuttered) for up to six modules (inserts and modules not included)
- Two mounting eyelets (by the cable opening) allow the MuTOA to be suspended
- Cable tie support slot will hold cable bundle in place during assembly
- Ideal for pre-assembled cable runs



Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CM6PIW	MuTOA 6-port outlet box accepts up to six *MINI-COM*® Modules when using 1/2 sloped inserts. Cable entry opening: .695" (17.7mm) to .825" (21.0mm) Dia.; Overall dimensions 2.36"H x 1.81"W x 7.90"L (59.9mm x 46mm x 200.7mm).	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray), BL (Black) and CL (Clear).
A complete listing of inserts can be found on page B3.15.

Component Labels for *MINI-COM*® MuTOA 6-Port Outlet Box



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
CM6PIW	C125X030FJJ	C125X030YPT	C125X030FJC	T031X000FJC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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Optional Magnets

- Used to mount surface mount boxes to metal surfaces



CBM-X

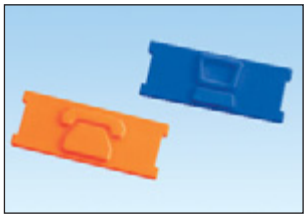


CSBM-X

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
CBM-X	Magnet for non-shuttered version surface mount boxes.	10	100
CSBM-X	Magnet for shuttered version surface mount boxes.	10	100

ULTIMATE ID® Icons

- Provide port identification of data and voice applications
- Compatible with *ULTIMATE ID*® Surface Mount Boxes, Faceplates and Patch Panel Faceplates
- Mount flush with *ULTIMATE ID*® Label Pocket



Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
UICIDIW-C	Plastic snap-in icon with data image.	Off White	100	1000
UICIPIW-C	Plastic snap-in icon with phone image.	Off White	100	1000

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray), BL (Black), OR (Orange), RD (Red), BU (Blue), GR (Green), YL (Yellow) or VL (Violet).
ULTIMATE ID® Icons are not TIA/EIA-606-A standard compliant.
See page B3.29 for *MINI-COM*® Icons.

ULTIMATE ID® Replacement Label Covers and Screw Covers

- For use with *ULTIMATE ID*® Faceplates, Patch Panels, Hook & Loop Marker Ties and Surface Mount Boxes



Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
UILC1CL-X	1-port label or screw cover.	Clear	10	100
UILC2CL-X	2-port label cover.	Clear	10	100
UILC3CL-X	3-port label cover.	Clear	10	100
UILC4CL-X	4-port label cover.	Clear	10	100
UILC6CL-X	6-port label cover.	Clear	10	100

‡For other colors replace CL (Clear) with appropriate color designation to match *ULTIMATE ID*® component.
See page B3.29 for *MINI-COM*® Replacement Screw Covers and Replacement Label Covers.

ULTIMATE ID® Write-On Labels

- Write-on labels for use with *ULTIMATE ID*® Faceplates, Surface Mount Boxes, and Patch Panels



UIWOL2

Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
UIWOL1-L	1-port, white non-adhesive polyester write-on label.	White	50	250
UIWOL2-L	2-port, white non-adhesive polyester write-on label.	White	50	250
UIWOL3-L	3-port, white non-adhesive polyester write-on label.	White	50	250
UIWOL4-L	4-port, white non-adhesive polyester write-on label.	White	50	250
UIWOL6-L	6-port, white non-adhesive polyester write-on label.	White	50	250

The TIA/EIA-606-A standard states that all labels shall be mechanically generated, write-on labels are not standard compliant.

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Icons

- Provide port identification of data and voice installations
- Offered in a variety of colors for color coding requirements
- Snap into dedicated slot of select *MINI-COM*® Modules, Surface Mount Boxes, and Faceplates



Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CIPIW-C	Plastic snap-in icon with phone image.	Off White	100	1000
CIDIW-C	Plastic snap-in icon with data image.	Off White	100	1000

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray), BL (Black), OR (Orange), RD (Red), BU (Blue), GR (Green), YL (Yellow) or VL (Violet).
Icons with lettering available, contact Customer Service.

Replacement Screw Cover

- For use in place of clear label covers for select surface mount boxes and single gang faceplates



Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CSCIW-X	Screw cover has a textured surface and blends with the faceplates and surface mount boxes for improved aesthetics.	Off White	10	100

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), IG (International Gray) or BL (Black).

Replacement Label/Label Cover Kits

- For use with *MINI-COM*® Executive and Classic Series Faceplates with Labels and select *MINI-COM*® Surface Mount Boxes



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
Label/Label Cover Kit			
CSGLLC-L	Single gang *MINI-COM*® Label/Label Cover Kit. Each kit contains 50 labels and 50 clear label covers.	50	250
Label/Label Cover Kits with Screws			
EFPK-XY	Single gang label/label cover and two screws. Also works with select surface mount boxes.	10	50
EFPK102G-XY	Double gang label/label cover and four screws.	10	50

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Depth to Rear of Module Reference Guide

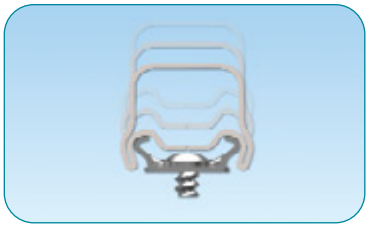
Part Number	All TG Style Modules		TX Style Modules		Shielded TX Style Modules		Fiber with Boot		Lead Frame Modules	
	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
MINI-COM® Classic Series Faceplates with Label and Label Cover										
CFPL2**, CFPL3**, CFPL4**, CFPL6**	1.23	31.2	1.16	29.5	1.43	36.3	1.89	48.0	1.11	28.2
MINI-COM® Classic Series Dedicated Sloped Faceplates										
CFPHS2**, CFPSL2**, CFPHSL4**, CFPSL4**, CFPSL6**	.95	24.1	.76	19.3	.96	24.4	.92	23.4	.80	20.3
MINI-COM® Classic Series Vertical Faceplates										
CFP1**, CFP2**, CFP4**	1.24	31.5	1.17	29.7	1.44	36.6	1.90	48.3	1.12	28.4
MINI-COM® Classic Series Horizontal Faceplates										
CFPH2**, CFPH4**	1.24	31.5	1.17	29.7	1.44	36.6	1.90	48.3	1.12	28.4
MINI-COM® Classic Series Faceplate Kits										
CFPS4**	.80	20.3	.80	20.3	.80	20.3	.92	23.4	.80	20.3
CFPF12**-2G	1.24	31.5	1.17	29.7	1.44	36.6	1.90	48.3	1.12	28.4
MINI-COM® Executive Series Faceplates										
CFPE1**, CFPE2**, CFPE4**, CFPE6**, CFPE10**-2G	.99	25.1	.92	23.4	1.19	30.2	1.65	41.9	.87	22.1
MINI-COM® Executive Series Faceplate Kit										
CFPSE4**	.66	16.8	.66	16.8	.79	20.1	1.02	25.9	.63	16.0
MINI-COM® Industrial Faceplates										
CFPWR4**, CFPTR4**	1.26	32.0	1.17	29.7	1.61	40.9	2.07	52.6	1.29	32.8
MINI-COM® Faceplate Frames for Sloped, Flat, and Blank Module Inserts										
CB**-2G										
Flat	1.24	31.5	.76	19.3	1.44	36.6	1.90	48.3	1.12	28.4
Sloped	.80	20.3	.80	20.3	.80	20.3	.92	23.4	.80	20.3
Recessed	1.36	34.5	1.36	34.5	1.49	37.8	1.72	43.7	1.33	33.8
30° insert	1.79	45.5	1.79	45.5	1.90	48.3	2.15	54.6	1.77	45.0
CBE**-2G										
Flat	.99	25.1	.92	23.4	1.19	30.2	1.65	41.9	.87	22.1
Sloped	.66	16.8	.66	16.8	.79	20.1	1.02	25.9	.63	16.0
Recessed	1.46	37.1	1.46	37.1	1.59	40.4	1.82	46.2	1.43	36.3
30° insert	1.54	39.1	1.54	39.1	1.65	41.9	1.90	48.3	1.52	38.6
MINI-COM® 106 Duplex Module Frames										
CF1062**	1.24	31.5	1.17	29.7	1.44	35.6	1.90	48.3	1.12	28.4
CF1064**	1.26	32.0	1.19	30.2	1.46	37.1	1.92	48.8	1.14	28.9
Classic Series Faceplates for Power or Communication Applications										
CP106**, CP106**-2G, CPG**, CPG**-2G	1.24	31.5	1.17	29.7	1.44	36.6	1.90	48.3	1.12	28.4
Executive Series Faceplates										
ECPG**, ECPG**-2G	.97	24.6	.90	22.9	1.17	29.7	1.63	41.4	.85	21.6
Stainless Steel Faceplates Including ULTIMATE ID® Faceplates										
WPS-20	1.24	31.5	1.17	29.7	1.44	36.6	1.90	48.3	1.12	28.4
WPS-202	1.24	31.5	1.17	29.7	1.44	36.6	1.90	48.3	1.12	28.4
CFP(L)2S,UICFP2S	1.26	32.0	1.19	30.2	1.46	37.1	1.97	50.0	1.14	29.0
CFP(L)4S, UICFP4S	1.26	32.0	1.19	30.2	1.46	37.1	1.97	50.0	1.14	29.0
CFP(L)6S, UICFP6S	1.26	32.0	1.19	30.2	1.46	37.1	1.97	50.0	1.14	29.0
CFP(L)4S-2G	1.26	32.0	1.19	30.2	1.46	37.1	1.97	50.0	1.14	29.0
CFP(L)8S-2G	1.26	32.0	1.19	30.2	1.46	37.1	1.97	50.0	1.14	29.0
CFP(L)10S-2G	1.26	32.0	1.19	30.2	1.46	37.1	1.97	50.0	1.14	29.0
In-Wall Box Adapter										
MIWBA**	Subtract .22" or 5.6mm from depth to rear of module modular furniture faceplate measurement									
MINI-COM® Snap-On Modular Furniture Faceplates										
CFFPL4**	1.10	27.9	1.01	25.7	1.28	32.5	1.74	44.2	.96	24.4
CFFP4**	1.10	27.9	1.01	25.7	1.28	32.5	1.74	44.2	.96	24.4
CFFPA2**	.86	21.8	.77	19.6	.76	19.3	.99	25.1	.60	15.2
MFFPE**	Subtract .50" or 12.7mm from depth to rear of module modular furniture faceplate measurement									
CFFPHM4**	1.09	27.7	1.01	25.7	1.28	32.5	1.74	44.2	.96	24.4
CFFPEBSL4**	.49	12.4	.49	12.4	.76	19.3	1.22	31.0	.44	11.2
CFFPSL4**	.49	12.4	.44	11.2	.57	14.5	.86	21.8	.41	10.4
Round Faceplates										
CRFPA2**	1.49	37.8	1.42	36.1	1.69	42.9	2.15	54.6	1.37	34.8
CFFPR1**-X	1.50	38.1	1.43	36.3	1.70	43.2	2.16	54.9	1.38	35.1
MINI-COM® ULTIMATE ID® Executive Series Faceplates										
UICFPSE2**	.73	18.5	.55	14.0	.88	22.4	1.50	38.1	.55	14.0
UICFPSE4**	.73	18.5	.55	14.0	.88	22.4	1.50	38.1	.55	14.0
UICFPSE6**	.73	18.5	.55	14.0	.88	22.4	1.50	38.1	.55	14.0
UICFPHSE2**	.73	18.5	.55	14.0	.88	22.4	1.50	38.1	.55	14.0
UICFPHSE4**	.73	18.5	.55	14.0	.88	22.4	1.50	38.1	.55	14.0
UICFPSE8**-2G	.73	18.5	.55	14.0	.88	22.4	1.50	38.1	.55	14.0
MINI-COM® ULTIMATE ID® Tamper Resistant Faceplate										
UICFPRTR4										
Flat	1.50	38.1	1.43	36.3	1.70	43.2	2.16	54.9	1.38	35.1
Sloped	1.22	31.0	1.04	26.4	.95	24.1	1.18	30.0	.79	20.1
Rescessed	1.62	41.1	1.62	41.1	1.75	44.5	1.98	50.3	1.59	40.4
30° insert	1.67	42.4	1.67	42.4	1.81	46.0	2.06	52.3	1.68	42.7
MINI-COM® ULTIMATE ID® Classic Series Faceplates										
UICFP2**, UICFP4**, UICFP6**, UICFPH2**, UICFPH4**	1.23	31.2	1.16	29.5	1.43	36.3	1.89	48.0	1.11	28.2
MINI-COM® ULTIMATE ID® Modular Furniture Faceplate										
UICFFP4BL	.86	21.8	.79	20.1	1.06	26.9	1.52	38.6	.74	18.8
Keystone Phone Plate with Keystone Module										
KWP5E and KWP6P	—	—	1.00	25.4	—	—	—	—	—	—

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PAN-WAY® METAL RACEWAY

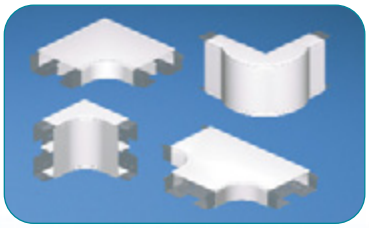
PAN-WAY® Metal Raceway is a series of single and multi-channel solutions for routing, protecting, concealing and terminating power wire and high performance copper, voice, video or fiber optic cable. *PANDUIT* metal raceway is designed with labor saving features to increase productivity and lower installed costs, while incorporating benefits of increased safety and cable protection. PAN-WAY® Metal Raceway is an innovative routing solution that offers superior benefits over competitive systems:





PMR5 and PMR7 Single Channel Metal Raceway

- Raceway system features a patent pending bonding design that provides full continuity of the ground path between fittings and channel, for increased electrical safety
- System components incorporate an innovative snap-mount assembly method for fast installations, resulting in measurable contractor labor savings
- Fittings and mounts can be attached using various types and sizes of fasteners, eliminating the requirements of using only flat head style screws
- One-piece channel construction eliminates the problem of channel separation, associated with competitive two-piece designs, saving installation time





PMR40 Multi-Channel Metal Raceway

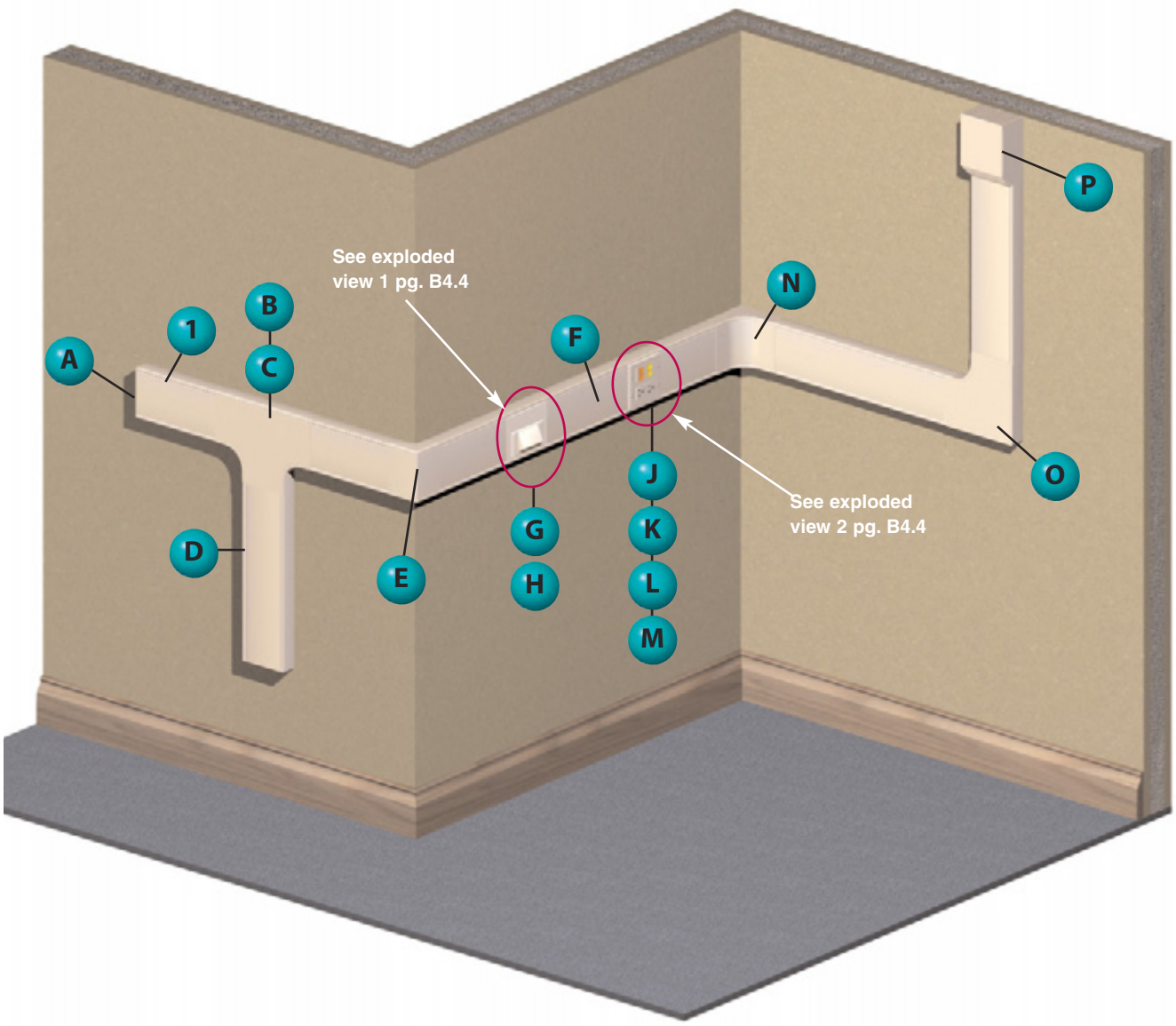
- Raceway accepts standard double gang faceplates for increased termination options and reduced number of components
- System includes optional faceplates and fittings to support high performance Category 6A copper and fiber optic cabling terminations
- Full capacity 2" bend radius fittings provide necessary cable protection without restricting channel capacity

PAN-WAY® Metal Raceway systems include a complete assortment of fittings, junction boxes, faceplates and accessories. They are available in white and almond color to match any decor and most popular electrical outlets. Systems are optimized for use with *PANDUIT*® MINI-COM® Modules for complete connectivity possibilities.

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A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

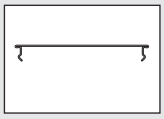
PMR40 Raceway Roadmap



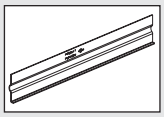
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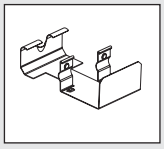
1 **PMR40** – PMR40 Metal Raceway (page B4.5)**



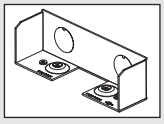
1 **PMR40C** – PMR40 Cover (page B4.5)**



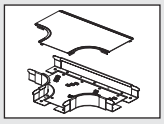
1 **PMR40DW* – PMR40 Divider Wall (page B4.5)**



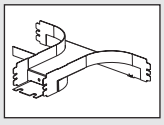
1 **PMR40CD-X – PMR40 Divider Clip (page B4.5)**



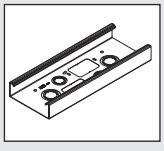
A **PMR40EC** – End Cap (page B4.6)**



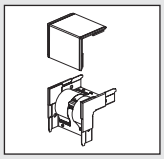
B **PMR40T** – Tee Fitting Extension Box (page B4.6)**



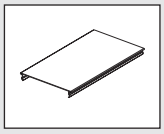
C **PMR40T50 – Tee Fitting Insert (page B4.6)**



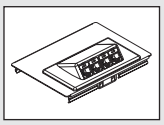
D **PMR40BF** – Backfeed Fitting (page B4.6)**



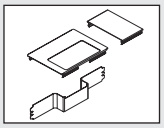
E **PMR40SOC** – Outside Corner (*no bend radius*) (page B4.6)**



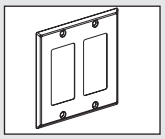
F **PMR40C7.75** – Pre-Cut Cover for mounting devices on 12" centers (page B4.5)**



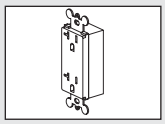
G **PMR40FH4** – Horizontal Sloped Communication Faceplate (page B4.6)**



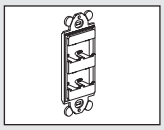
H **PMR40DP50** – PMR40 50/50 Data Plate (page B4.6)**



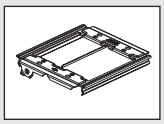
J **MP2GR** – Double Gang Rectangular Faceplate (page B4.16)**



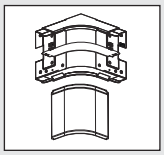
K **ERU20** – 20 V Specification Grade Rectangular Outlet (page B4.72)**



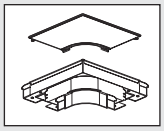
L **CFG4 –*MINI-COM*® Frame (page B3.17)**



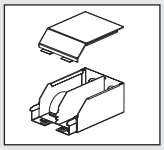
M **PMR40DB50-X – Device Bracket (page B4.6)**



N **PMR40IC** – Inside Corner (page B4.6)**



O **PMR40RA** – Right Angle (page B4.6)**



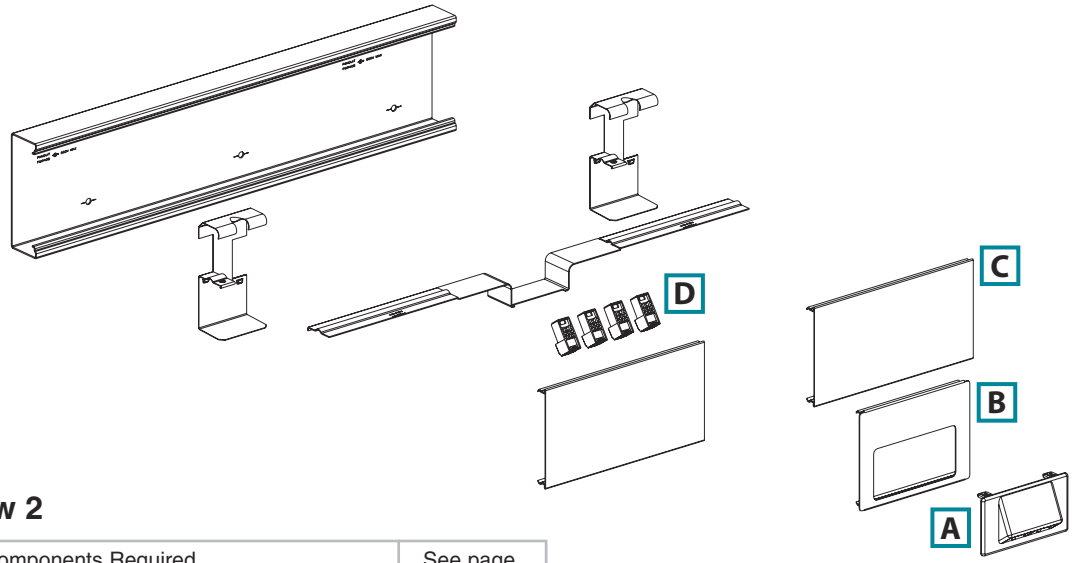
P **PMR40EE** – Entrance End (page B4.6)**

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PMR40 Configurations

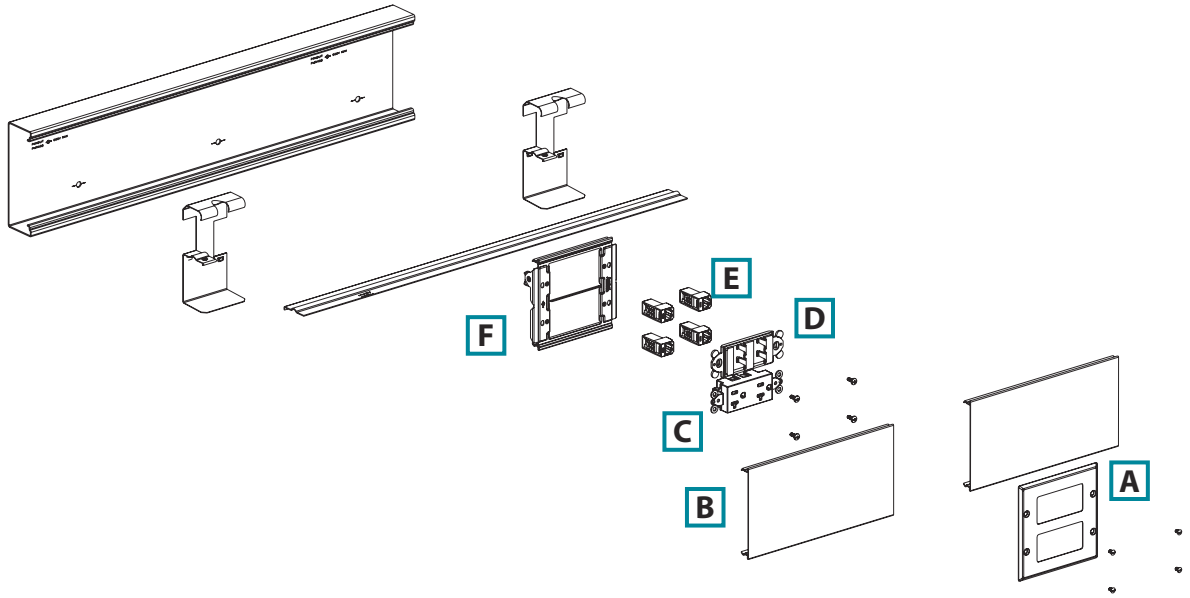
Exploded View 1

	Components Required	See page
A.	PMR40FH4 = Horizontal Sloped Communication Faceplate.	B4.6
B.	PMR40DP50** = PMR40 50/50 Data Plate and Offset Divider Wall.	B4.6
C.	PMR40C7.75** = Pre-Cut Cover for mounting devices on 12" centers.	B4.5
D.	*MINI-COM®* Modules.	Section B2



Exploded View 2

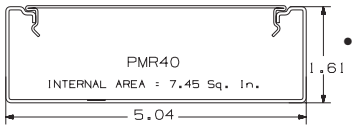
	Components Required	See page
A.	MP2GR** = Double Gang Rectangular Faceplate.	B4.6
B.	PMR40C7.75** = Pre-Cut Cover for mounting devices on 12" centers.	B4.5
C.	ERU20** = 20 V Specification Grade Rectangular Outlet.	B4.72
D.	CFG4 = *MINI-COM®* Frame.	B3.17
E.	*MINI-COM®* Modules.	Section B2
F.	PMR40DB50-X = Device Bracket.	B4.6

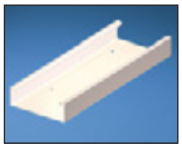


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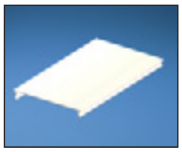
NEW! c UL us PAN-WAY® PMR40 Metal Raceway System

- c-UL-us listed and rated to 600 V; meets UL 5 and CSA 22.2 No. 62-93 safety standards
- Raceway accepts standard double gang faceplates for increased termination options and reduced number of components
- System includes optional faceplates and fittings to support high performance Category 6A copper and fiber optic cabling terminations
- Full capacity 2" bend radius fittings provide necessary cable protection without restricting channel capacity
- Supplied with pre-punched mounting holes




PMR40B


PMR40C


PMR40C7.75


PMR40C13.75


PMR40C19.75


PMR40C31.75


PMR40DW


PMR40DC

Part Number	Part Description	Raceway Size	Color‡	Length (Ft.)	Std. Pkg. Qty.	Std. Ctn. Qty.
PMR40 Metal Raceway Base						
PMR40BWH10	PMR40 raceway base available in 10' lengths. Supplied with pre-punched mounting holes.	5.04" x 1.61" (128.00mm x 40.9mm)	White	10	50	0
PMR40 Metal Raceway Cover						
PMR40CWH5	PMR40 metal raceway cover available in 5' lengths.	—	White	5	50	0
PMR40 Metal Raceway Divider Wall						
PMR40C7.75WH	7.75" pre-cut cover. To be used with PMR40 raceway for mounting devices on 12" centers.	—	White	—	1	10
PMR40C13.75WH	13.75" pre-cut cover. To be used with PMR40 raceway for mounting devices on 18" centers.	—	White	—	1	10
PMR40C19.75WH	19.75" pre-cut cover. To be used with PMR40 raceway for mounting devices on 24" centers.	—	White	—	1	0
PMR40C31.75WH	31.75" pre-cut cover. To be used with PMR40 raceway for mounting devices on 36" centers.	—	White	—	1	10
PMR40DW5	PMR40 divider wall snaps into PMR40DC-X to create separate channels. Must use wire retainers to ensure channel separation per UL/CSA. Available in 5' lengths.	—	Gray	5	50	0
PMR40DC-X	Divider wall clip. Required for supporting PMR40DW. 30" spacing recommended between clips.	—	Gray	—	10	100

‡For other colors replace WH (White) with AL (Almond).
Order number of feet required in multiples of standard carton quantity.

c UL us PAN-WAY® PMR40 Metal Raceway Fittings


PMR40BC


PMR40RA

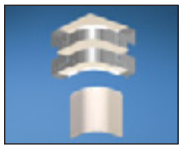

PMR40SIC

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
PMR40BC-X	Base coupler. Used to join sections of PMR40 raceway base.	Gray	10	100
PMR40RAWH	Right angle fitting. Used to join sections of PMR40 raceway at right angles.	White	1	10
PMR40SICWH	Inside corner fitting w/out bend radius control. Used to join sections of PMR40 raceway at inside corners.	White	1	10

‡For other colors replace WH (White) with AL (Almond).
Order number of feet required in multiples of standard carton quantity.

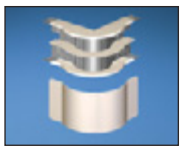
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PAN-WAY® PMR40 Metal Raceway Fittings (continued)


PMR40IC


PMR40I45E


PMR40SOC


PMR40OC


PMR40E45E


PMR40T

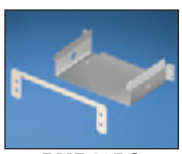

PMR40TD


PMR40EC


PMR40EE


PMR40TR


PMR40BF


PMR40PC


PMR40ICC


PMR40WR


PMR40DB50


PMR40DP50


PMR40FH2


PMR40FH4


PMR40KH2


PMR40KH4

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
PMR40ICWH	Inside corner fitting. Used to join sections of PMR40 raceway at inside corners.	White	1	10
PMR40I45EWH	Internal 45° elbow fitting. Used to join sections of PMR40 raceway at 45° inside corners.	White	1	10
PMR40SOCWH	Outside corner fitting w/out bend radius control. Used to join sections of PMR40 raceway at outside corners.	White	1	10
PMR40OCWH	Outside corner fitting. Used to join sections of PMR40 raceway at outside corners.	White	1	10
PMR40E45EWH	External 45° elbow fitting. Used to join sections of PMR40 raceway at 45° outside corners.	White	1	10
PMR40TWH	Tee fitting. Used to join sections of PMR40 raceway at tee intersections.	White	1	10
PMR40TDWH	Divided tee fitting. Used to join sections of PMR40 raceway at tee intersections while separating power and data within fitting.	White	1	10
PMR40ECWH	End cap fitting. Used to terminate or allow entry into PMR40 raceway. Breakouts for 1/2" conduit.	White	1	10
PMR40EEWH	Entrance end fitting. Breakouts for 3/4", 1", and 1 1/4" conduit which allows entry from ceiling or wall.	White	1	10
PMR40TRWH	WIREMOLD* to PMR40 transition fitting. In-line transition fitting from WIREMOLD* 4000 series to PMR40 raceway.	White	1	10
PMR40BFWH	Backfeed fitting. Allows cable entry through the back of the PMR40 raceway. Two round breakouts for 1/2", 3/4" and 1" conduit, two round breakouts for 3/4", 1", and 1 1/4" conduit and two 1 11/16" x 2 9/16" rectangular breakouts.	White	1	10
PMR40PCWH	Panel connector. To connect PMR40 raceway with surface type panel boxes.	White	1	10
PMR40ICCWH	Internal corner coupling.	White	1	10
PMR40WR-X	Wire retainer. Used to hold wires in place during installation.	Gray	10	100
PMR40DB50-X	Device mounting bracket 50/50 split. Used to mount NEMA standard single gang electrical outlets and communication devices with either screw-on or snap-on single gang faceplates.	Gray	1	10
PMR40DP50WH	PMR40 data plate for mounting data faceplates PMR40FH2, PMR40FH4, PMR40KH2 or PMR40KH4 when a 50/50 split channel is used in the PMR40 base. Includes data plate, 2.50" pre-cut cover, and offset divider wall.	White	1	10
PMR40FH2WH	Snap-on horizontal sloped communication faceplate. Accepts two *PANDUIT® MINI-COM®* Modules (not included). No additional mounting hardware required.	White	1	10
PMR40FH4WH	Snap-on horizontal sloped communication faceplate. Accepts four *PANDUIT® MINI-COM®* Modules (not included). No additional mounting hardware required.	White	1	10
PMR40KH2WH	Snap-on horizontal sloped communication faceplate. Accepts two Keystone modules (not included). No additional mounting hardware required.	White	1	10
PMR40KH4WH	Snap-on horizontal sloped communication faceplate. Accepts four Keystone modules (not included). No additional mounting hardware required.	White	1	10

‡For other colors replace WH (White) with AL (Almond).
*WIREMOLD is a registered trademark of the Wiremold Co.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Cable Fill Capacities for PMR40 Metal Raceway

This information is to be used as a guide in selecting the proper size raceway. The maximum amounts may vary according to the cable installation methods, straightness of cables, etc.



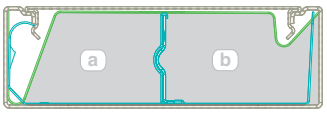
A = 7.45 in.²

Cable fill #1: Open channel without devices



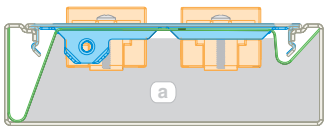
A = 6.18 in.²

Cable fill #2: Undivided, wire retainer only



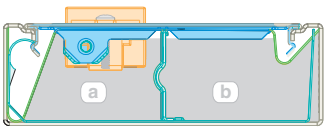
A = 2.64 in.² B = 3.04 in.²

Cable fill #3: Divided with wire retainer



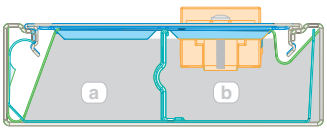
A = 4.64 in.²

Cable fill #4: Undivided with duplex receptacle on two sides



A = 1.87 in.² B = 2.84 in.²

Cable fill #5: Divided with duplex receptacle on (A) side



A = 2.49 in.² B = 2.21 in.²

Cable fill #6: Cable fill # 6: Divided with duplex receptacle on (B) side

SPEC = 40% cable fill – Recommended by TIA/EIA 569-B for design.

MAX for 60% cable fill – Recommended by TIA/EIA 569-B for unplanned additions.

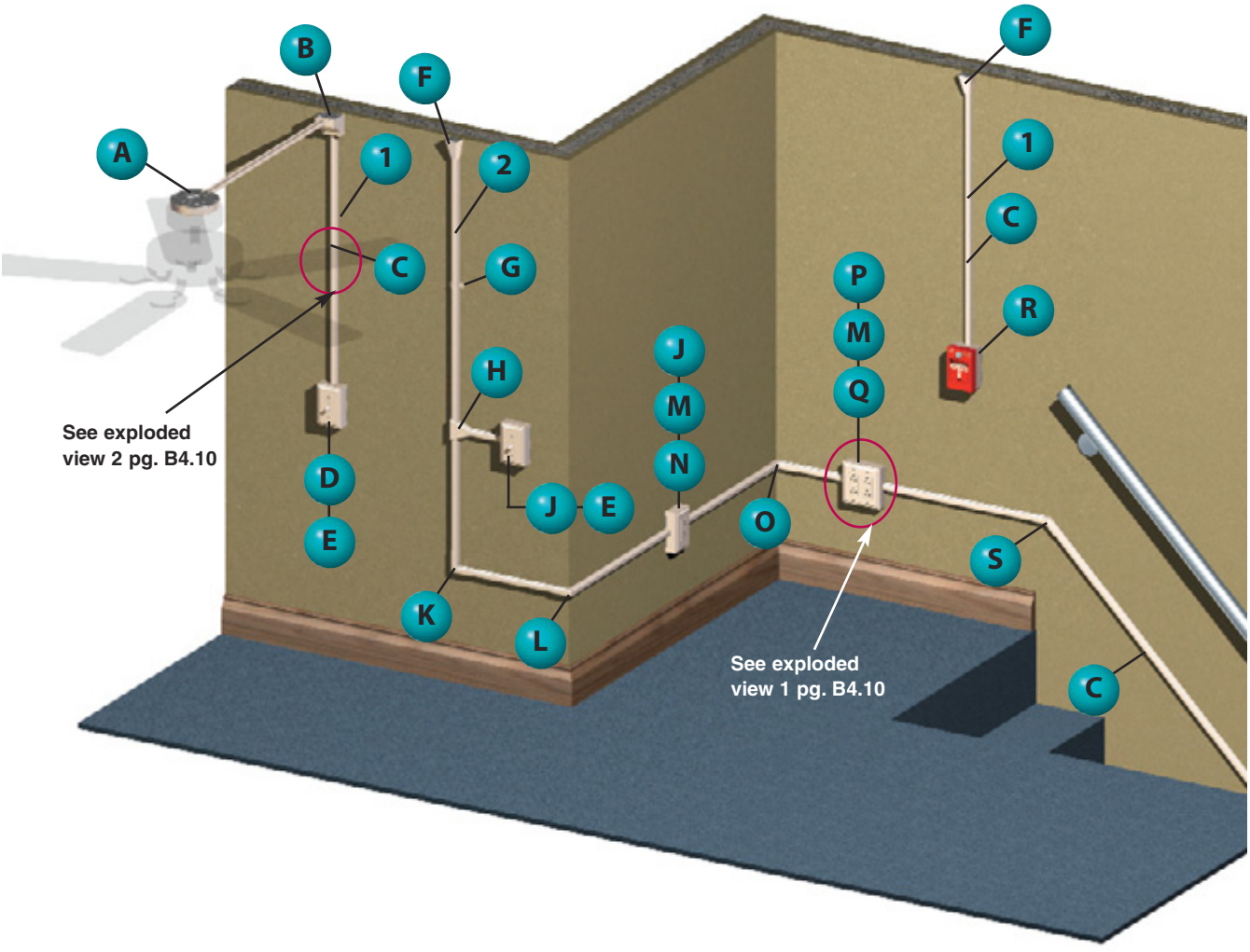
MAX for 40% Power cable fill – Based on available internal area.

Raceway Type and Configuration		Fill Area (In.²)	Electrical Cables			Voice Grade Cable		Data Grade Cable		Fiber Optic Cable	
			14 AWG	12 AWG	10 AWG	24 AWG UTP CM/CMR		24 AWG/UTP CM		2 Strand	
			THHN/T90			Category 6		Augmented Category 6			
			0.111	0.130	0.164	0.250		0.354		0.175	
			FILL			FILL		FILL		FILL	
			MAX	MAX	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX
			40%	40%	40%	40%	60%	40%	60%	40%	60%
1. PMR40: Undivided (Base and Cover)		7.45	307	224	140	60	91	30	46	123	185
2. PMR40: Undivided, Wire Retainer Only		6.18	255	186	117	50	75	25	38	102	154
3a.	PMR40: Divided, with Wire Retainer	2.64	109	79	50	21	32	10	16	43	65
3b.		3.04	125	91	57	24	37	12	18	50	75
4. PMR40: Undivided w/ duplex receptacle two sides		4.64	191	139	87	**	**	**	**	**	**
5a.	PMR40: Divided w/ duplex receptacle on (A) side	1.87	78	57	36	**	**	**	**	**	**
5b.		2.84	**	**	**	28	39	11	17	47	70
6a.	PMR40: Divided w/ duplex receptacle on (B) side	2.49	**	**	**	20	30	10	15	41	62
6b.		2.21	91	66	41	**	**	**	**	**	**

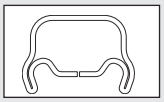
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A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

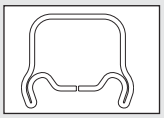
PMR5/7 Raceway Roadmap



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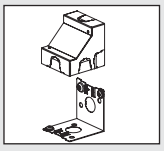
1 **PMR5** – PMR5 Metal Raceway (page B4.11)**



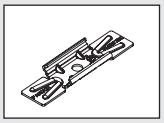
2 **PMR7** – PMR7 Metal Raceway (page B4.11)**



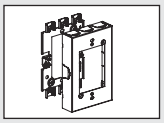
A **PMR5738A** – Round Fan/Fixture Box (page B4.15)**



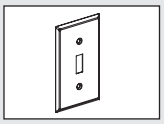
B **PMR57CB** – Corner Box (page B4.12)**



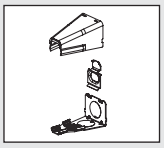
C **PMR57SC-X – Supporting Clip (page B4.11)**



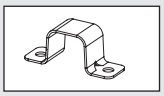
D **PMR5751** – Single Gang Extension Box (page B4.14)**



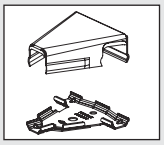
E **MP1TS** – Single Gang Toggle Switch Faceplate (page B4.16)**



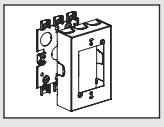
F **PMR57EE – Entrance End Fitting (page B4.12)**



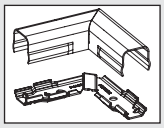
G **PMR7MS** – Mounting Strap (page B4.11)**



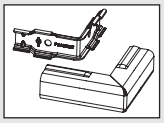
H **PMR57T** – Tee Fitting (page B4.12)**



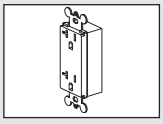
J **PMR5747** – Single Gang Shallow Outlet Box (page B4.14)**



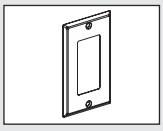
K **PMR7RA** – Right Angle Fitting (page B4.12)**



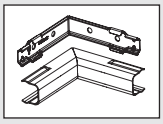
L **PMR7OC** – Outside Corner Fitting (page B4.12)**



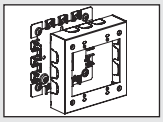
M **ERU20** – 20 V Specification Grade Rectangular Outlet (page B4.72)**



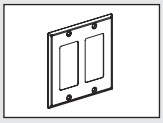
N **MP1GR** – Single Gang Rectangular Faceplate (page B4.16)**



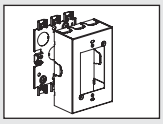
O **PMR7IC** – Inside Corner Fitting (page B4.12)**



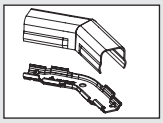
P **PMR5747-2** – Double Gang Shallow Outlet Box (page B4.14)**



Q **MP2GR** – Double Gang Rectangular Faceplate (page B4.16)**



R **PMR5748** – Single Gang Outlet Box (page B4.14)**



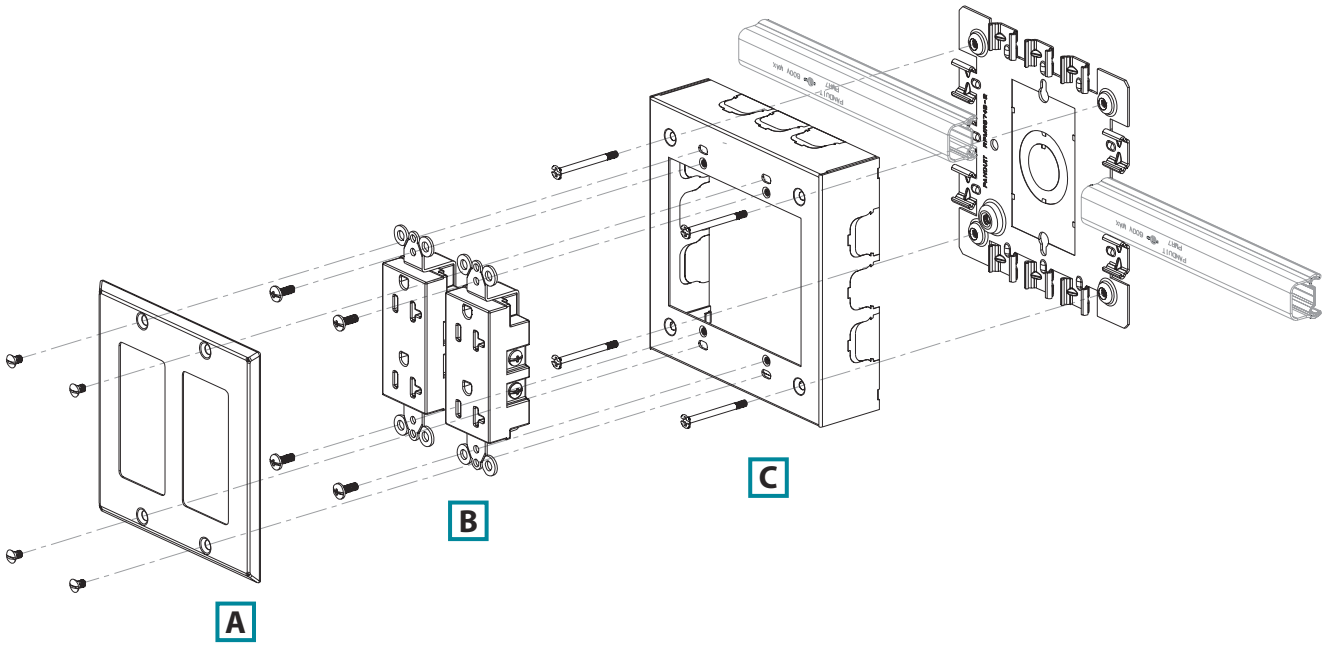
S **PMR7DA** – Diagonal 45° Angle Fitting (page B4.12)**

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PMR5/PMR7 Configurations

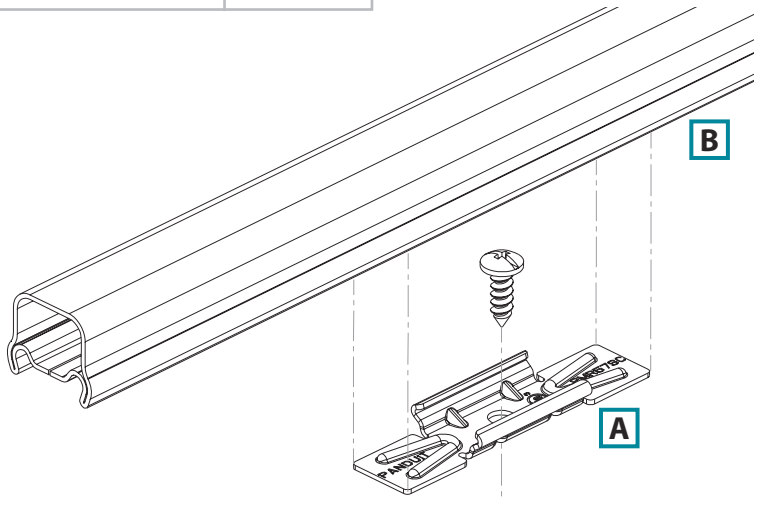
Exploded View 1

	Components Required	See page
A.	MP2GR = Double Gang Rectangular Faceplate.	B4.16
B.	ERU20 = 20 A Specification Rectangular Outlet.	B4.72
C.	PMR5744-2 = Double Gang Deep Outlet Box.	B4.14



Exploded View 2

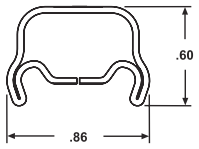
	Components Required	See page
A.	PMR57SC-X = Supporting clip.	B4.11
B.	PMR7*** = PMR7 Metal Raceway.	B4.11



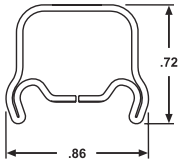
Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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NEW! c UL us PAN-WAY® PMR5/PMR7 Metal Raceway System

- c-UL-us listed and rated to 600V; meets UL5 and CSA22.2 No. 62-93 safety standards
- Raceway system features a patent pending bonding design that provides full continuity of the ground path between fittings and channel, for increased electrical safety
- System components incorporate a unique snap mount assembly method for faster installation
- Fittings and mounts can be attached using various types and sizes of fasteners, eliminating the requirements of using only flat head style screws
- One-piece channel construction eliminates the problem of channel separation, associated with competitive two-piece designs, saving installation time

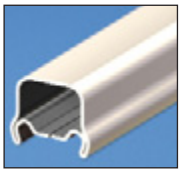


PMR5
Internal Area = 0.22 Sq. In.

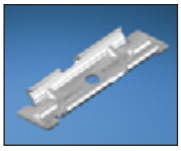


PMR7
Internal Area = 0.30 Sq. In.

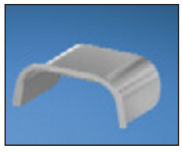

PMR5


PMR7


PMR57SC


PMR57JC


PMR57GC


PMR5WPB
PMR7WPB


PMR5MS/
PMR7MS

Part Number	Part Description	Raceway Size	Color‡	Length (Ft.)	Std. Pkg. Qty.	Std. Ctn. Qty.
PMR5 Metal Raceway						
PMR5WH5	One-piece single channel metal surface raceway. Available in 5' lengths.	.86" x .60" (21.8mm x 15.2mm)	White	5	5	50
PMR5WH10	One-piece single channel metal surface raceway. Available in 10' lengths.	.86" x .60" (21.8mm x 15.2mm)	White	10	100	100
PMR7 Metal Raceway						
PMR7WH5	One-piece single channel metal surface raceway. Available in 5' lengths.	.86" x .72" (21.8mm x 18.3mm)	White	5	5	50
PMR7WH10	One-piece single channel metal surface raceway. Available in 10' lengths.	.86" x .72" (21.8mm x 18.3mm)	White	10	100	100
Supporting Clip						
PMR57SC-X	Supporting clip used to support lengths of PMR5 or PMR7 raceway at any desired point.	—	Gray	—	10	100
Joint Coupling						
PMR57JC-X	Joint coupling used to join two lengths of PMR5 or PMR7 raceway.	—	Gray	—	10	100
Ground Clip						
PMR57GC-X	Ground clip used to provide additional grounding of raceway or to ground remote installations. For use with PMR5 or PMR7 raceway.	—	Gray	—	10	100
Metal Bushing						
PMR5WPB-X	Bushing used to protect wires from abrasion. For use with PMR5 raceway.	—	Gray	—	10	100
PMR7WPB-X	Bushing used to protect wires from abrasion. For use with PMR7 raceway.	—	Gray	—	10	100
Mounting Strap						
PMR5MSWH-X	Mounting strap for use with PMR5 raceway.	—	White	—	10	100
PMR7MSWH-X	Mounting strap for use with PMR7 raceway.	—	White	—	10	100

‡For other colors replace WH (White) with AL (Almond)

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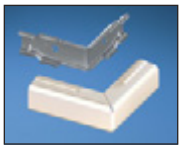
PAN-WAY® PMR5/PMR7 Metal Raceway Fittings


PMR5CC
PMR7CC


PMR5RA
PMR7RA


PMR5DA
PMR7DA


PMR5IC
PMR7IC


PMR5OC
PMR7OC


PMR57LTE


PMR57RTE


PMR57T


PMR57EE


PMR57AOC


PMR57CB


PMR5TR
PMR7TR


PMR57EBC


PMR57ECC


PMR57JBC50
PMR57JBC75


PMR57CC50
PMR57CC75

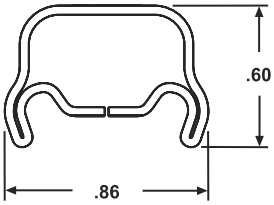
Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
PMR5CCWH-X	Coupler fitting for use with PMR5 raceway.	White	10	100
PMR7CCWH-X	Coupler fitting for use with PMR7 raceway.	White	10	100
PMR5RAWH	Right angle fitting for use with PMR5 raceway.	White	1	10
PMR7RAWH	Right angle fitting for use with PMR7 raceway.	White	1	10
PMR5DAWH	Diagonal 45° angle fitting for use with PMR5 raceway.	White	1	10
PMR7DAWH	Diagonal 45° angle fitting for use with PMR7 raceway.	White	1	10
PMR5ICWH	Inside corner fitting for use with PMR5 raceway.	White	1	10
PMR7ICWH	Inside corner fitting for use with PMR7 raceway.	White	1	10
PMR5OCWH	Outside corner fitting for use with PMR5 raceway.	White	1	10
PMR7OCWH	Outside corner fitting for use with PMR7 raceway.	White	1	10
PMR57LTEWH	Left twisted elbow for 90° twist with 90° turn. For double turn at right angles from one surface to another, such as a flat run on a sidewall to a flat run on a ceiling. For use with PMR5 and PMR7 raceway.	White	1	10
PMR57RTEWH	Right twisted elbow for 90° twist with 90° turn. For double turn at right angles from one surface to another, such as a flat run on a sidewall to a flat run on a ceiling. For use with PMR5 and PMR7 raceway.	White	1	10
PMR57TWH	Tee fitting for use with PMR5 or PMR7 raceway.	White	1	10
PMR57EEWH	Entrance end fitting. 1/2" conduit breakouts allows entry of PMR5 or PMR7 raceway from a box, the ceiling, or a wall. Spring steel bushing included for use when connecting to a box.	White	1	10
PMR57AOCWH	Adjustable offset allows PMR5 or PMR7 to be mounted flush to wall when connected to surface type panel boxes. Adjustable between 5/8" and 1 3/8" from surface to center of conduit. 1/2" chase nipple and locknut included.	White	1	10
PMR57CBWH	Corner box for connecting PMR5 or PMR7 raceway. Each leg has 1/2" conduit breakouts and room for splicing.	White	1	10
PMR5TRWH	WIREMOLD* to PMR5 transition fitting. In-line transition fitting from WIREMOLD* 500 series to PMR5 raceway.	White	1	10
PMR7TRWH	WIREMOLD* to PMR7 Transition fitting. In-line transition fitting from WIREMOLD* 700 series to PMR7 raceway.	White	1	10
PMR57EBCWH	Elbow box connector used to connect PMR5 or PMR7 raceway to boxes at a right angle. Breakouts for 1/2" conduit.	White	1	10
PMR57ECCWH	Elbow conduit connector used to connect PMR5 or PMR7 raceway to conduit at a right angle. Breakouts for 1/2" conduit.	White	1	10
PMR57JBC50-X	Junction box connector used to connect PMR5 or PMR7 raceway to boxes with 1/2" conduit breakout.	White	10	100
PMR57JBC75-X	Junction box connector used to connect PMR5 or PMR7 raceway to boxes with 3/4" conduit breakout.	White	10	100
PMR57CC50-X	Conduit connector used to connect PMR5 or PMR7 raceway to 1/2" conduit.	White	10	100
PMR57CC75-X	Conduit connector used to connect PMR5 or PMR7 raceway to 3/4" conduit.	White	10	100

‡For other colors replace WH (White) with AL (Almond).
*WIREMOLD is a registered trademark of the Wiremold Co.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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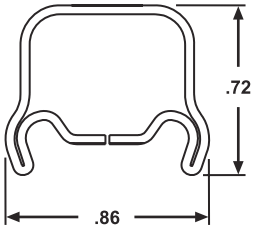
Cable Fill Capacities for PMR5/PMR7 Metal Raceway

This information is to be used as a guide in selecting the proper size raceway. The maximum amounts may vary according to the cable installation methods, straightness of cables, etc.



PMR5

A = .22 in.²



PMR7

A = .30 in.²

SPEC = 40% cable fill – The recommended design in cable capacity, leaves room for future moves, adds, and changes.

MAX for Data = 60% cable fill – The maximum cable quantity based on cable interweaving and packing factors.

Raceway Type and Configuration	Fill Area (In.²)	Electrical Cables			Voice Grade Cable		Data Grade Cable		Fiber Optic Cable	
		14 AWG	12 AWG	10 AWG	24 AWG UTP CM/CMR		24 AWG/UTP CM		2 Strand	
		THHN/T90								
		0.111	0.130	0.164	0.250		0.354		0.175	
		FILL			FILL		FILL		FILL	
		MAX	MAX	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX
		40%	40%	40%	40%	60%	40%	60%	40%	60%
PMR5	0.22	9	6	4	1	2	0	1	3	5
PMR7	0.30	12	8	5	2	3	1	1	4	7

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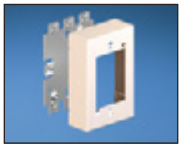
PAN-WAY® Metal Raceway Boxes

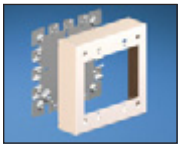

PMR5760

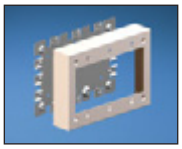

PMR5751


PMR5751-2

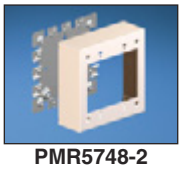

PMR5751-3


PMR5747


PMR5747-2


PMR5747-3


PMR5748


PMR5748-2


PMR5748-3


PMR5744S

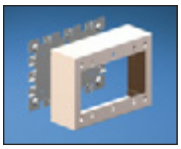

PMR5744S-2

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
PMR5760WH	Single gang blank extension box. For use with *PAN-WAY®* PMR5 or PMR7 Raceway. 4.92"L x 3.17"W x .94"H. (125.0mm x 80.5mm x 23.8mm)	White	1	10
PMR5751WH	Single gang extension box. Box accepts *PAN-WAY®* Faceplates or any NEMA standard single gang faceplate. For use with *PAN-WAY®* PMR5 or PMR7 Raceway. 4.92"L x 3.17"W x .94"H. (125.0mm x 80.5mm x 23.8mm)	White	1	10
PMR5751-2WH	Double gang extension box. Box accepts *PAN-WAY®* Faceplates or any standard double gang faceplate. For use with *PAN-WAY®* PMR5 or PMR7 Raceway. 4.92"L x 4.92"W x .94"H (125.0mm x 125.0mm x 23.8mm)	White	1	10
PMR5751-3WH	Three gang extension box. Box accepts *PAN-WAY®* Faceplates or any standard three gang faceplate. For use with *PAN-WAY®* PMR5 or PMR7 Raceway. 4.92"L x 6.72"W x .94"H (125.0mm x 170.7mm x 23.8mm)	White	1	10
PMR5747WH	Single gang shallow outlet box. Box accepts *PAN-WAY®* Faceplates or any NEMA standard single gang faceplate. For use with *PAN-WAY®* PMR5 or PMR7 Raceway. Breakouts for 1/2" conduit. 4.92"L x 3.17"W x 1.38"H. (125.0mm x 80.5mm x 34.9mm)	White	1	10
PMR5747-2WH	Double gang shallow outlet box. Box accepts *PAN-WAY®* Faceplates or any standard double gang faceplate. For use with *PAN-WAY®* PMR5 or PMR7 Raceway. Breakouts for 1/2" and 1" conduit. 4.92"L x 4.92"W x 1.38"H. (125.0mm x 125.0mm x 34.9mm)	White	1	10
PMR5747-3WH	Three gang shallow outlet box. Box accepts *PAN-WAY®* Faceplates or any standard three gang faceplate. For use with *PAN-WAY®* PMR5 or PMR7 Raceway. Breakouts for 1/2" conduit. 4.92"L x 6.72"W x 1.38"H. (125.0mm x 170.7mm x 34.9mm)	White	1	10
PMR5748WH	Single gang outlet box. Box accepts *PAN-WAY®* Faceplates or any NEMA standard single gang faceplate. For use with *PAN-WAY®* PMR5 or PMR7 Raceway. Breakouts for 1/2" conduit. 4.92"L x 3.17"W x 1.75"H. (125.0mm x 80.5mm x 44.5mm)	White	1	10
PMR5748-2WH	Double gang outlet box. Box accepts *PAN-WAY®* Faceplates or any standard double gang faceplate. For use with *PAN-WAY®* PMR5 or PMR7 Raceway. Breakouts for 1/2" and 1" conduit. 4.92"L x 4.92"W x 1.75"H. (125.0mm x 125.0mm x 44.5mm)	White	1	10
PMR5748-3WH	Three gang outlet box. Box accepts *PAN-WAY®* Faceplates or any standard three gang faceplate. For use with *PAN-WAY®* PMR5 or PMR7 Raceway. Breakouts for 1/2" conduit. 4.92"L x 6.72"W x 1.75"H. (125.0mm x 170.7mm x 44.5mm)	White	1	10
PMR5744SWH	Single gang intermediate outlet box. Box accepts *PAN-WAY®* Faceplates or any NEMA standard single gang faceplate. For use with *PAN-WAY®* PMR5 or PMR7 Raceway. Breakouts for 1/2" conduit. 4.92"L x 3.17"W x 2.25"H. (125.0mm x 80.5mm x 57.2mm)	White	1	10
PMR5744S-2WH	Double gang intermediate outlet box. Box accepts *PAN-WAY®* Faceplates or any standard double gang faceplate. For use with *PAN-WAY®* PMR5 or PMR7 Raceway. Breakouts for 1/2" and 1" conduit. 4.92"L x 4.92"W x 2.25"H. (125.0mm x 125.0mm x 57.2mm)	White	1	10

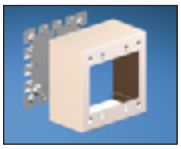
‡For other colors replace WH (White) with AL (Almond).

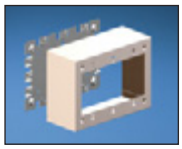
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PAN-WAY® Metal Raceway Boxes (continued)


PMR5744S-3


PMR5744


PMR5744-2

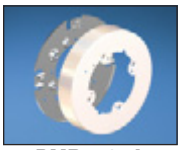

PMR5744-3


PMR5738


PMR5738A

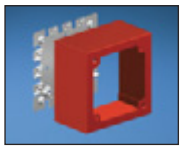

PMR5739


PMR5737


PMR5737A


PMR5739A


PMR5752


PMR5753

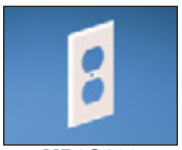
Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
PMR5744S-3WH	Three gang intermediate outlet box. Box accepts PAN-WAY® Faceplates or any standard three gang faceplate. For use with PAN-WAY® PMR5 or PMR7 Raceway. Breakouts for 1/2" conduit. 4.92"L x 6.72"W x 2.25"H. (125.0mm x170.7mm x 57.2mm)	White	1	10
PMR5744WH	Single gang deep outlet box. Box accepts PAN-WAY® Faceplates or any NEMA standard single gang faceplate. For use with PAN-WAY® PMR5 or PMR7 Raceway. Breakouts for 1/2" conduit. 4.92"L x 3.17"W x 2.75"H. (125.0mm x 80.5mm x 69.9mm)	White	1	10
PMR5744-2WH	Double gang deep outlet box. Box accepts PAN-WAY® Faceplates or any standard double gang faceplate. For use with PAN-WAY® PMR5 or PMR7 Raceway. Breakouts for 1/2" and 1" conduit. 4.92"L x 4.92"W x 2.75"H. (125.0mm x 80.5mm x 69.9mm)	White	1	10
PMR5744-3WH	Three gang deep outlet box. Box accepts PAN-WAY® Faceplates or any standard three gang faceplate. For use with PAN-WAY® PMR5 or PMR7 Raceway. Breakouts for 1/2" conduit. 4.92"L x 6.72"W x 2.75"H. (125.0mm x 170.7mm x 69.9mm)	White	1	10
PMR5738WH	Round fixture box with solid base is c-UL-us rated to accept devices up to 50 lbs. For use with PAN-WAY® PMR5 or PMR7 Raceway. Base has four 1/2" conduit breakouts. Dia.= 4.77"D x 1.00"H.(121.2mm x 25.4mm)	White	1	10
PMR5738AWH	Round fan or fixture box with solid base is c-UL-us rated to accept devices up to 50 lbs. For use with PAN-WAY® PMR5 or PMR7 Raceway. Base has four 1/2" conduit breakouts. Dia. = 5.53"D x 1.00"H. (140.5mm x 25.4mm)	White	1	10
PMR5739WH	Round fixture box with solid base is c-UL-us rated to accept devices up to 50 lbs. For use with PAN-WAY® PMR5 or PMR7 Raceway. Base has four 1/2" conduit breakouts. Dia. = 6.37"D x 1.00"H. (161.8mm x 25.4mm)	White	1	10
PMR5737WH	Round extension box with open base is c-UL-us rated to accept devices up to 50 lbs. For use with PAN-WAY® PMR5 or PMR7 Raceway. Dia. = 4.76"D x 1.00"H. (121.0mm x 25.4mm)	White	1	10
PMR5737AWH	Round extension box with open base is c-UL-us rated to accept devices up to 50 lbs. For use with PAN-WAY® PMR5 or PMR7 Raceway. Dia. = 5.53"D x 1.00"H. (140.5mm x 25.4mm)	White	1	10
PMR5739AWH	Round extension box with open base is c-UL-us rated to accept devices up to 50 lbs. For use with PAN-WAY® PMR5 or PMR7 Raceway. Dia. = 6.37"D x 1.00"H. (161.8mm x 25.4mm)	White	1	10
PMR5752RD	Alarm device box. Box accepts alarm devices and safety signals designed to fit 4" square back boxes. For use with PAN-WAY® PMR5 or PMR7 Raceway. Breakouts for 1/2" and 1" conduit. 4.92"L x 4.92"W x 1.42"H. (125.0mm x 125.0mm x 36.1mm) **Available in red only.**	Red	1	10
PMR5753RD	Deep alarm device box. Box accepts alarm devices and safety signals designed to fit 4" square back boxes. For use with PAN-WAY® PMR5 or PMR7 Raceway. Breakouts for 1/2" and 1" conduit. 4.92"L x 4.92"W x 2.80"H. (125.0mm x 125.0mm x 71.0mm) **Available in red only.**	Red	1	10

‡For other colors replace WH (White) with AL (Almond).

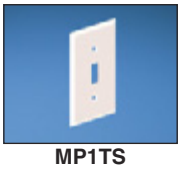
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PAN-WAY® Metal Raceway Faceplates

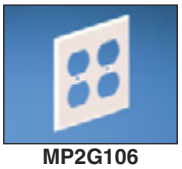

MP1GB


MP1G106

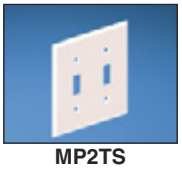

MP1GR

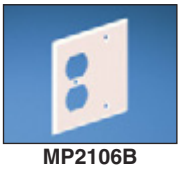

MP1TS


MP2GB


MP2G106

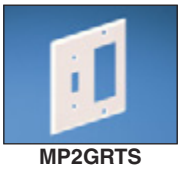

MP2GR


MP2TS


MP2106B


MP2G106TS

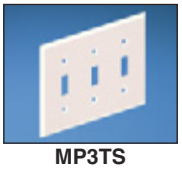

MP2GRB


MP2GRTS


MP2G106R


MP3G106


MP3GR


MP3TS


MP3G1062TS

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
MP1GBWH	Metal single gang blank faceplate.	White	1	10
MP1G106WH	Metal single gang 106 duplex faceplate. Covers one NEMA standard 106 duplex electrical outlet or one standard 106 communication module frame.	White	1	10
MP1GRWH	Metal single gang rectangular faceplate. Covers one NEMA standard rectangular electrical outlet or one standard rectangular communication module frame	White	1	10
MP1TSWH	Metal single gang toggle switch faceplate. Covers one NEMA standard toggle switch.	White	1	10
MP2GBWH	Metal double gang blank faceplate.	White	1	10
MP2G106WH	Metal double gang 106 duplex faceplate. Covers two NEMA standard 106 duplex electrical outlets or two standard 106 communication module frames.	White	1	10
MP2GRWH	Metal double gang rectangular faceplate. Covers two NEMA standard rectangular electrical outlets or two standard rectangular communication module frames.	White	1	10
MP2TSWH	Metal double gang toggle switch faceplate. Covers two NEMA standard toggle switch.	White	1	10
MP2G106BWH	Metal double gang 106 duplex/blank faceplate. Covers one NEMA standard 106 duplex electrical outlet or standard 106 communication module frame with opposite side blank.	White	1	10
MP2G106TSWH	Metal double gang 106 duplex/toggle switch faceplate. Covers one NEMA standard 106 duplex outlet or standard 106 communication module frame and one NEMA standard toggle switch.	White	1	10
MP2GRBWH	Metal double gang rectangular/blank cover faceplate. Covers one NEMA standard rectangular electrical outlet or standard rectangular communication module frame with opposite side blank.	White	1	10
MP2GRTSWH	Metal double gang rectangular/toggle switch faceplate. Covers one NEMA standard rectangular electrical outlet or standard rectangular communication module frame and one NEMA standard toggle switch.	White	1	10
MP2G106RWH	Metal double gang 106 duplex/rectangular faceplate. Covers one NEMA standard 106 duplex outlet or standard 106 communication module frame and one NEMA standard rectangular outlet or standard rectangular communication module frame.	White	1	10
MP3G106WH	Metal three gang 106 duplex faceplate. Covers three NEMA standard 106 duplex electrical outlets or three standard 106 communication module frames.	White	1	10
MP3GRWH	Metal three gang rectangular faceplate. Covers three NEMA standard rectangular electrical outlets or three standard rectangular communication module frames.	White	1	10
MP3TSWH	Metal three gang toggle switch faceplate. Covers three NEMA standard toggle switches.	White	1	10
MP3G1062TSWH	Metal three gang 106 duplex/two toggle switch faceplate. Covers one NEMA standard 106 duplex electrical outlet or one standard 106 communication module frame and two NEMA standard toggle switches.	White	1	10

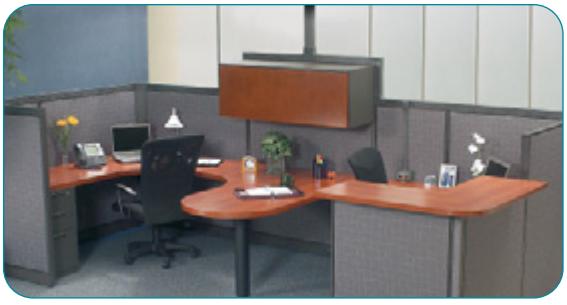
‡For other colors replace WH (White) with AL (Almond).

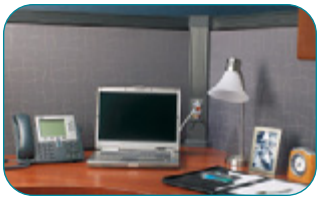
Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

PAN-WAY® OFFICE FURNITURE RACEWAY

PAN-WAY® Office Furniture Raceway is a one-piece single channel system designed to route data cabling along the top of office furniture partitions. Outlets can be positioned at any point along the partition at desk level or in the corner at the intersection of two partitions. Office furniture raceway has a tamper resistant closure design, which protects sensitive cabling from accidental damage and discourages unauthorized access, yet the system is accessible by a qualified installer for moves, adds and changes.









- **Designed for desktop terminations which utilize the typically unused area of the cubicle**
- **Fittings meet TIA/EIA bend radius requirements preventing cable performance degradation, yet maintain original aesthetic "squared corner" styling of furniture**
- **Designed to work with major office furniture manufacturer's panels (such as STEELCASE*, HERMAN MILLER▪ and others)**
- **Robust design includes a one-piece hinge and tamper resistant closure design which increases product stability and reduces inadvertent or unauthorized access to data cabling**
- **Designed for use with *PANDUIT* connectivity; also accepts common manufacturers' connectivity with use of a NEMA standard 70mm faceplate or module frame**

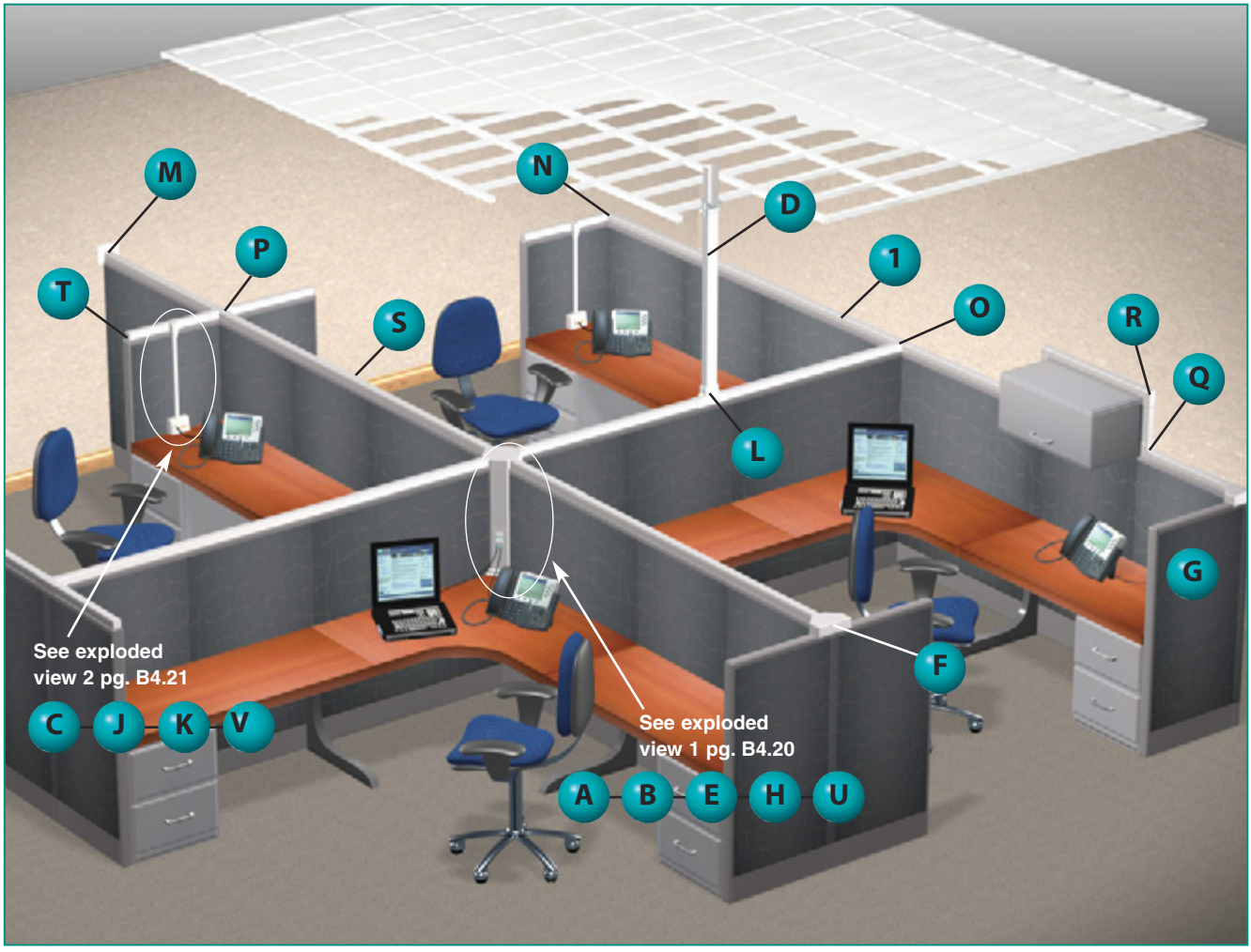
The system includes a full complement of fittings, accessories, and termination options. *PAN-WAY®* Office Furniture Raceway is available in four popular colors to blend with most office furniture systems and creates a virtually invisible cost effective routing solution.

*STEELCASE is a registered trademark of Steelcase Development, Inc.
▪HERMAN MILLER is a registered trademark of Herman Miller, Inc., Zeeland MI.

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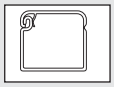
A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

Office Furniture Raceway Roadmap

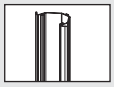


Note: Office furniture raceway is designed to blend with its environment. Shown in white on office slate furniture for illustration purposes only.

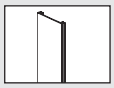
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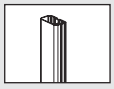
1 OFR20**6 – Office Furniture Raceway (page B4.22)



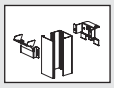
A OFCR70**6 – Corner Raceway Base (page B4.22)



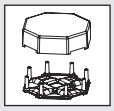
B OFCRC70**6 – Corner Raceway Cover (page B4.22)



C OFVR5**6 – Vertical Raceway (page B4.22)



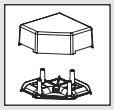
D OFR20CP**8 – Communication Pole (page B4.23)



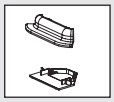
E OFR20OFCR70**4 – Four Cubicle Drop Fitting (page B4.23)



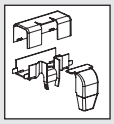
F OFR20OFCR70**2 – Two Cubicle Drop Fitting (page B4.23)



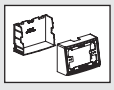
G OFR20OFCR70**1 – One Cubicle Drop Fitting (page B4.23)



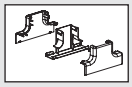
H OFCR70EC** – End Cap Fitting (page B4.24)



J OFR20SO** – Spill-Over Fitting (page B4.24)



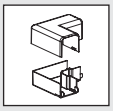
K OFR20DMB** – Desk Mount Box (page B4.24)



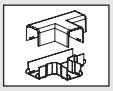
L OFR20MPT** – Mid Panel Tee Fitting (page B4.24)



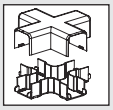
M OFR20WE** – Wall Entrance Fitting (page B4.24)



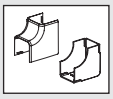
N OFR20RA** – Right Angle Fitting (page B4.24)



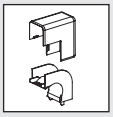
O OFR20T** – Tee Fitting (page B4.24)



P OFR20CR** – Cross Fitting (page B4.24)



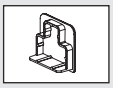
Q OFR20IC** – Inside Corner Fitting (page B4.25)



R OFR20OC** – Outside Corner Fitting (page B4.25)



S OFR20CC** – Coupler Fitting (page B4.25)



T OFR20EC** – End Cap Fitting (page B4.25)



U OF70FV4** – Vertical Sloped Communication Snap-On Faceplate (page B4.25)



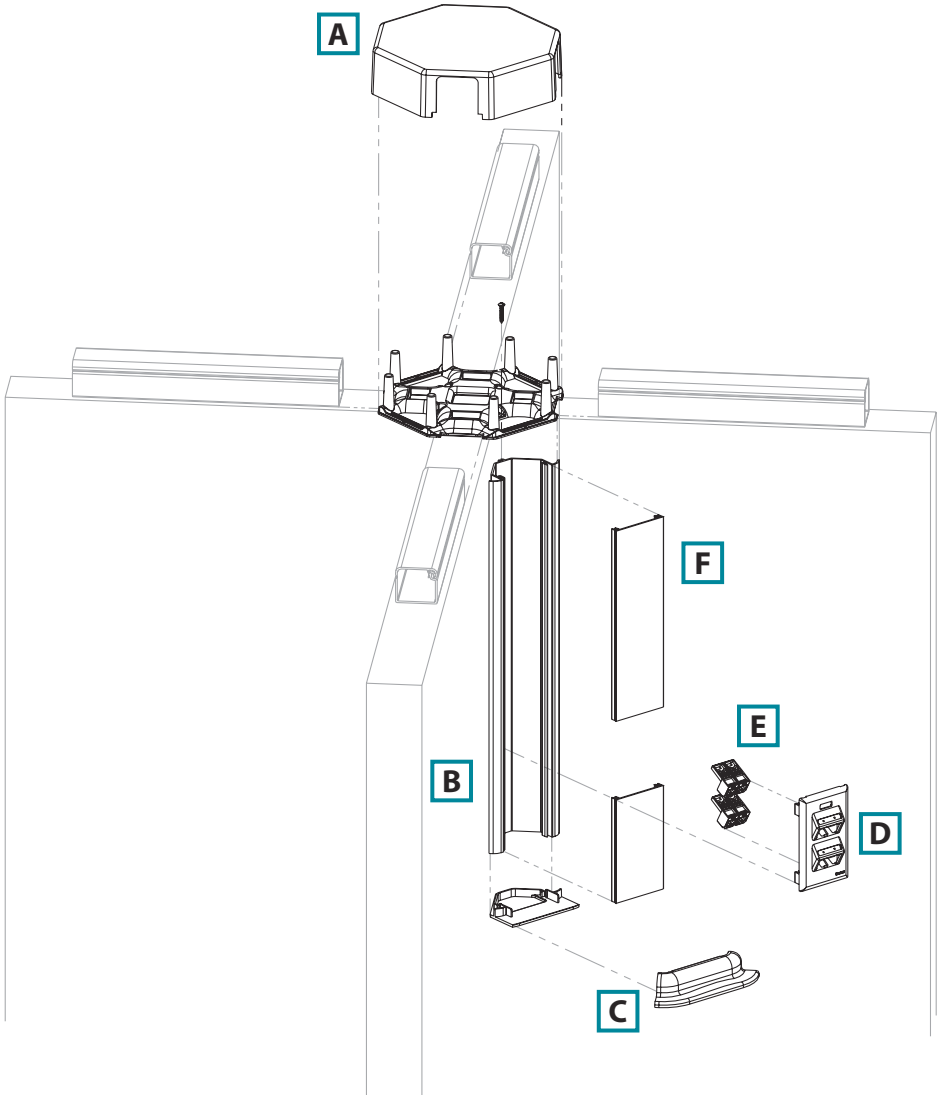
V OF70FH4** – Horizontal Sloped Communication Snap-On Faceplate (page B4.25)

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Office Furniture Configurations

Exploded View 1

	Components Required	See page
A.	OFR20OFCR70**4 = Four Cubicle Drop Fitting.	B4.23
B.	OFCR70**6 = Corner Raceway Base.	B4.22
C.	OFCR70EC = End Cap Fitting.	B4.24
D.	OF70FV4 = Vertical Sloped Communication Snap-On Faceplate.	B4.25
E.	*MINI-COM*® Modules.	Section B2
F.	OFCRC70**6 = Corner Raceway Cover.	B4.22

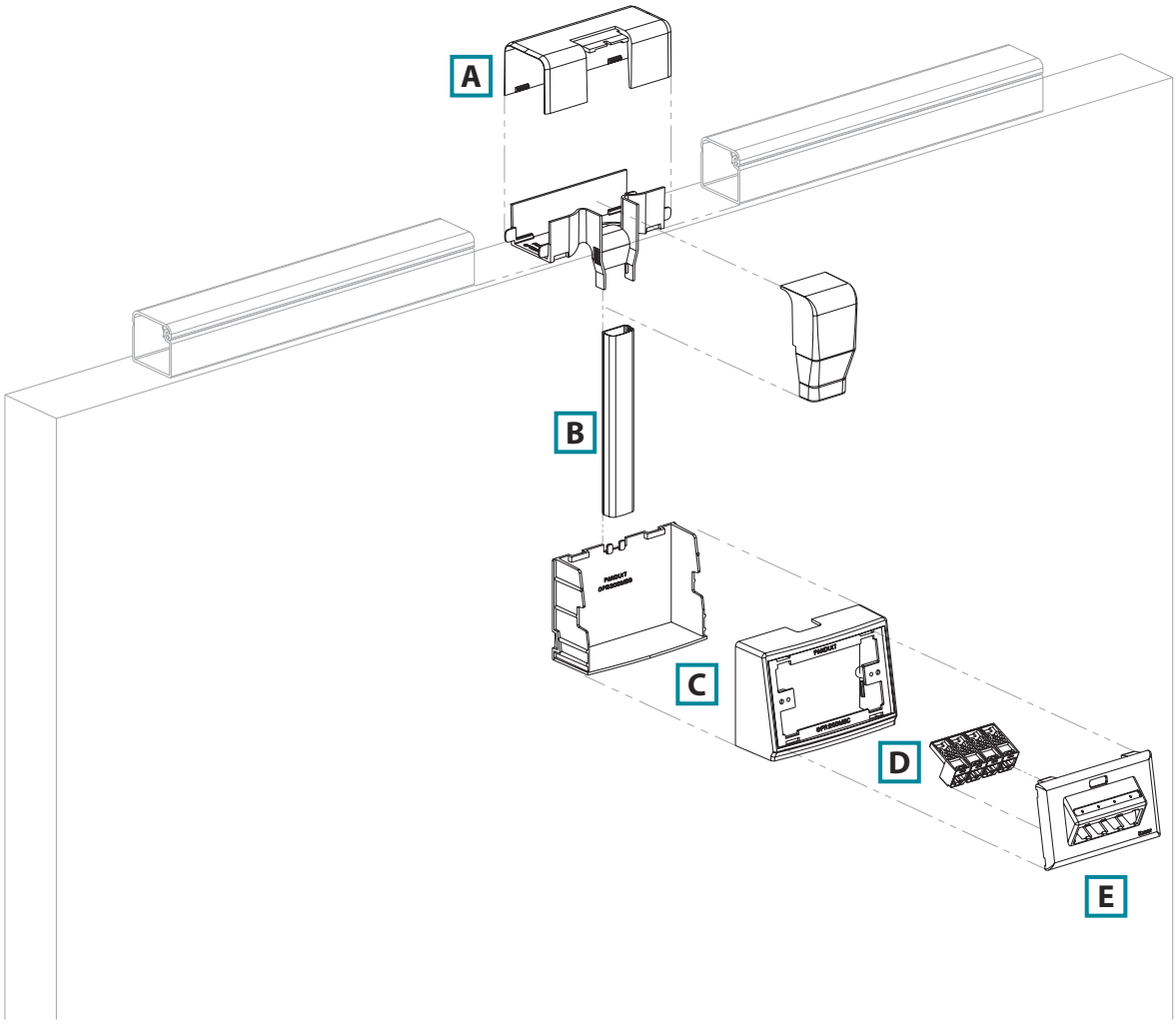


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Office Furniture Configurations (continued)

Exploded View 2

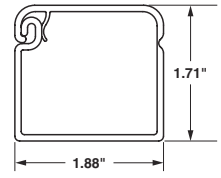
	Components Required	See page
A.	OFR20SO** = Spill-Over Fitting.	B4.24
B.	OFVR5**6 = Vertical Raceway.	B4.22
C.	OFR20DMB = Desk Mount Box.	B4.24
D.	*MINI-COM*® Modules.	Section B2
E.	OF70FH4** = Horizontal Sloped Communication Snap-On Faceplate.	B4.25



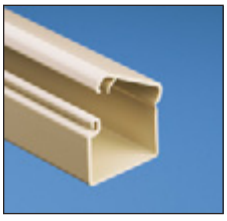
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PAN-WAY® Office Furniture Raceway System

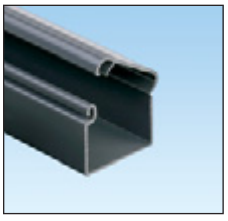
- UL listed in accordance with UL 5C requirements for Class 2 Communication Cable Management Systems
- Maintains bend radius control throughout the entire office furniture raceway system as required by TIA/EIA-568-B and 569-B
- Faceplates are compliant with the labeling requirements of the TIA/EIA-606-A standard
- Robust design and tamper resistant closure increases product stability and prevents damage to cabling during and after installation
- Product supplied with adhesive backing for fast and easy installation
- Creates a virtually invisible solution for routing data cables on panels from all common manufacturers with a top cap width between 1.88" and 2.30"
- Designed for use with PAN-NET® Connectivity, also accepts all common manufacturers' connectivity with use of a NEMA standard 70mm faceplate or module frame

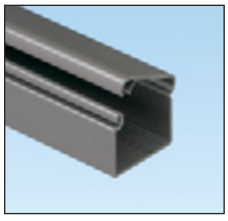


OFFICE FURNITURE RACEWAY
Internal Area = 2.31 Sq. In.


Office Beige (OB)


Office Gray (OG)


Office Slate (OS)


Medium Tone (MT)


OFR20

Part Number	Part Description	Raceway Size	Color‡	Length (Ft.)	Std. Pkg. Qty.	Std. Ctn. Qty.
OFR20OB6	One-piece single channel low voltage raceway with adhesive tape backing for data cable routing along top of modular furniture partitions. Available in 6' lengths.	1.88" x 1.71" (48.0mm x 44.0mm)	Office Beige	6	6	48
OFR20OB8	One-piece single channel low voltage raceway with adhesive tape backing for data cable routing along top of modular furniture partitions. Available in 8' lengths.	1.88" x 1.71" (48.0mm x 44.0mm)	Office Beige	8	8	64

‡For other colors, replace OB (Office Beige) with OS (Office Slate), OG (Office Gray), or MT (Medium Tone).
Order number of feet required in multiples of standard carton quantity.

PAN-WAY® Office Furniture Raceway Fittings

- Office furniture raceway fittings have been designed to maintain the TIA/EIA required 1" minimum bend radius for high performance copper and fiber optic cabling systems


OFCR70


OFCRC70

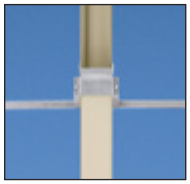

OFVR5

Part Number	Part Description	Labels Required	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
OFCR70OB6	Office furniture corner raceway base. Used to terminate low voltage data cabling in the corner at the intersection of modular office furniture panels. Accepts 70mm standard faceplates. Available in 6' lengths.	—	Office Beige	6	48
OFCRC70OB6	Office furniture corner raceway cover. Available in 6' lengths.	—	Office Beige	6	48
OFVR5OB6	Office furniture vertical raceway. One-piece single channel raceway used to connect OFR20**6 or OFR20**8 to desk mount box (OFR20DMB**) and must be used with OFR20SO** or OFR20DSO**. Available in 6' lengths.	—	Office Beige	6	120

‡For other colors, replace OB (Office Beige) with OS (Office Slate), OG (Office Gray), or MT (Medium Tone).
**Computer printable labels found on pages F1.5 – F1.12.

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PAN-WAY® Office Raceway Fittings (continued)


OFR20CP


OFR20OFCR70**4


OFR20OFCR70**2


OFR20OFCR70**1


OFR20OFCR70**1P


OFR20OFCR70**2P


OFR20OFCR70**4P

Part Number	Part Description	Labels Required	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
OFR20CPOB8	Communication pole. Allows for data cable entry into office furniture raceway from suspended ceiling. 8' pole allows maximum 7' distance from top of furniture partition to ceiling. Must be used with OFR20MPT**. Note: Not intended for use at intersection of furniture panels.	—	Office Beige	1	—
OFR20OFCR70OB4	Four cubicle drop fitting. Allows the transition from office furniture raceway run horizontally along partition wall to office furniture corner raceway mounted vertically in four cubicles at the intersection of partitions. Fitting maintains 1" minimum bend radius of cabling. Supplied with adhesive tape.	—	Office Beige	1	10
OFR20OFCR70OB2	Two cubicle drop fitting. Allows the transition from office furniture raceway run horizontally along partition wall to office furniture corner raceway mounted vertically in two cubicles at the intersection of partitions. Fitting maintains 1" minimum bend radius of cabling. Supplied with adhesive tape.	—	Office Beige	1	10
OFR20OFCR70OB1	One cubicle drop fitting. Allows the transition from office furniture raceway run horizontally along partition wall to office furniture corner raceway mounted vertically in one cubicle at the intersection of partitions. Fitting maintains 1" minimum bend radius of cabling. Supplied with adhesive tape.	—	Office Beige	1	10
OFR20OFCR70OB1P	One cubicle drop bypass fitting. Allows the transition from office furniture raceway run horizontally along partition wall, around existing furniture pole, to office furniture corner raceway mounted vertically in one cubicle at the intersection of partitions. Fitting maintains 1" minimum bend radius of cabling. Supplied with adhesive tape.	—	Office Beige	1	10
OFR20OFCR70OB2P	Two cubicle drop bypass fitting. Allows the transition from office furniture raceway run horizontally along partition wall, around existing furniture pole, to office furniture corner raceway mounted vertically in two cubicles at the intersection of partitions. Fitting maintains 1" minimum bend radius of cabling. Supplied with adhesive tape.	—	Office Beige	1	10
OFR20OFCR70OB4P	Four cubicle drop bypass fitting. Allows the transition from office furniture raceway run horizontally along partition wall, around existing furniture pole, to office furniture corner raceway mounted vertically in four cubicles at the intersection of partitions. Fitting maintains 1" minimum bend radius of cabling. Supplied with adhesive tape.	—	Office Beige	1	10

‡For other colors, replace OB (Office Beige) with OS (Office Slate), OG (Office Gray), or MT (Medium Tone).
**Computer printable labels found on pages F1.5 – F1.12.

Chart continues on page B4.24

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PAN-WAY® Office Furniture Raceway Fittings (continued)


OFRCR70EC


OFR20SO


OFR20DSO


OFR20DMB


OFR20MPT


OFR20WE


OFR20RA


OFR20T


OFR20CR

Part Number	Part Description	Labels Required	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
OFCR70ECOB	Corner raceway end cap fitting. Opening allows cord passage through fitting such as monitor and keyboard cables. Supplied with adhesive tape.	—	Office Beige	1	10
OFR20SOOB	Spill-over fitting. Allows transition from office furniture raceway run horizontally along partition wall to office furniture vertical raceway in one location. Adjustable fitting maintains 1" minimum bend radius of cabling and works with various panel widths between 1.88" – 2.30" (47.7mm – 58mm). Supplied with adhesive tape.	—	Office Beige	1	10
OFR20DSOOB	Double spill-over fitting. Fitting is used to spill over both sides of the furniture partitions at the same location. Incorporates a built-in, yet removable end cap that eliminates the need for additional raceway and fittings to terminate the pathway.	—	Office Beige	1	10
OFR20DMBOB	Desk mount box. Box accepts office furniture snap-on faceplates as well as 70mm NEMA standard screw-on faceplates. Designed for use with OFVR5**6 raceway and OFR20SO**, OFR20DSO** spill-over fittings. Supplied with adhesive tape.	—	Office Beige	1	10
OFR20MPTOB	Mid-panel tee fitting. Used to connect communication pole to office furniture raceway run horizontally along partition wall. Supplied with adhesive tape. Note: not intended for use at intersection of furniture panels.	—	Office Beige	1	10
OFR20WEOB	Wall entrance fitting. Allows entry from wall to office furniture raceway run horizontally along partition walls. Fitting includes bend radius protection and trim plate to cover wall opening. Requires minimum wall opening of 4.5"W x 3.0"H. (114.3mm x 76.2mm). Supplied with adhesive tape.	—	Office Beige	1	10
OFR20RAOB	Right angle fitting. Used to join sections of office furniture raceway at 90° flat junction. Supplied with adhesive tape.	—	Office Beige	1	10
OFR20TOB	Tee fitting. Used to create an undivided tee junction between sections of office furniture raceway. Supplied with adhesive tape.	—	Office Beige	1	10
OFR20CROB	Cross fitting. Used to join sections of office furniture raceway at four corners. Supplied with adhesive tape.	—	Office Beige	1	10

‡For other colors, replace OB (Office Beige) with OS (Office Slate), OG (Office Gray), or MT (Medium Tone).
**Computer printable labels found on pages F1.5 – F1.12.

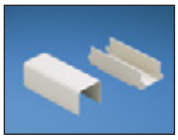
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PAN-WAY® Office Furniture Raceway Fittings (continued)


OFR20IC


OFR20OC


OFR20CC


OFR20LC


OFR20EC


OF70FH2


OF70FV2


OF70FH4


OF70FV4


T70SDB-X

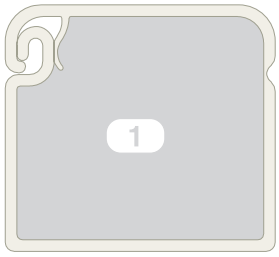
Part Number	Part Description	Labels Required	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
OFR20ICOB	Inside corner fitting. Used to join sections of office furniture raceway at inside corner. Supplied with adhesive tape.	—	Office Beige	1	10
OFR20OCOB	Outside corner fitting. Used to join sections of office furniture raceway at outside corner. Supplied with adhesive tape.	—	Office Beige	1	10
OFR20CCOB-X	Coupler fitting. For use with office furniture raceway.	—	Office Beige	10	100
OFR20LCOB	Long coupler fitting (with base). Used to bridge office furniture raceway between panel sections. Can also be used to fill void left by spill-over fitting, when furniture partitions are reconfigured. Supplied with adhesive tape.	—	Office Beige	1	10
OFR20ECOB	End cap fitting. Used to terminate office furniture raceway. Supplied with adhesive tape.	—	Office Beige	1	10
OF70FH2OB	Snap-on single gang horizontal sloped communication faceplate. Accepts up to two *PANDUIT® MINI-COM®* Modules (not included). No additional mounting hardware required. TIA/EIA-606-A compliant.	One 1-Port One 2- Port	Office Beige	1	10
OF70FV2OB	Snap-on single gang vertical sloped communication faceplate. Accepts up to two *PANDUIT® MINI-COM®* Modules (not included). No additional mounting hardware required. TIA/EIA-606-A compliant.	One 1-Port One 2- Port	Office Beige	1	10
OF70FH4OB	Snap-on single gang horizontal sloped communication faceplate. Accepts up to four *PANDUIT® MINI-COM®* Modules (not included). No additional mounting hardware required. TIA/EIA-606-A compliant.	One 1-Port One 4- Port	Office Beige	1	10
OF70FV4OB	Snap-on single gang vertical sloped communication faceplate. Accepts up to four *PANDUIT® MINI-COM®* Modules (not included). No additional mounting hardware required. TIA/EIA-606-A compliant.	One 1-Port One 4- Port	Office Beige	1	10
T70SDB-X	Standard faceplate bracket. Used to mount NEMA standard 70mm single gang screw-on faceplates. Can be used with T-70, Twin-70, TG-70 raceway and *PAN-POLE™* Communication Pole.	—	Gray	10	—

‡For other colors, replace OB (Office Beige) with OS (Office Slate), OG (Office Gray), or MT (Medium Tone).
**Computer printable labels found on pages F1.5 – F1.12.

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Cable Fill Capacities for Office Furniture

This information is to be used as a guide in selecting the proper size raceway. The maximum amounts may vary according to the cable installation methods, straightness of cables, etc.



A = 2.31 in.²

Cable fill #1: Open channel without devices

SPEC = 40% cable fill – The recommended design in cable capacity, leaves room for future moves, adds, and changes.

MAX for Data = 60% cable fill – The maximum cable quantity based on cable interweaving and packing factors.

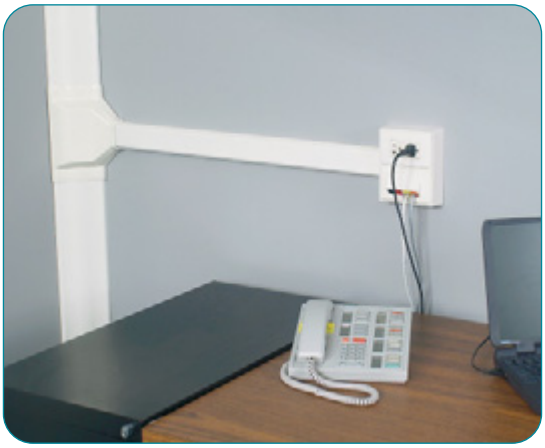
	Raceway Type and Configuration	Fill Area (In.²)	Data Grade Cables		Data Grade Cables		Audio/Video		Fiber Optic Cable	
			23 AWG/UTP CM		23/24 AWG/UTP CM		RG6		2 Strand	
			Augmented Cat. 6		Cat. 6 (4pr)					
			DIA. = .354		DIA. = .250		DIA. = .275		DIA. = .175	
			FILL		FILL		FILL		FILL	
			SPEC	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX
			(40%)	(60%)	(40%)	(60%)	(40%)	(60%)	(40%)	(60%)
1.	OFR20	2.30	9	14	18	28	15	23	38	57

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PAN-WAY® COVE RACEWAY

PAN-WAY® Cove Raceway is a full line of NEC and TIA/EIA compliant raceway, which has the appearance of architectural molding; that allows you to route, conceal, protect and terminate copper, voice, video, fiber optic or power cabling. This offering adds elegance to any room or work area by softening the horizontal angles between the wall and ceiling or the vertical angles between two walls.





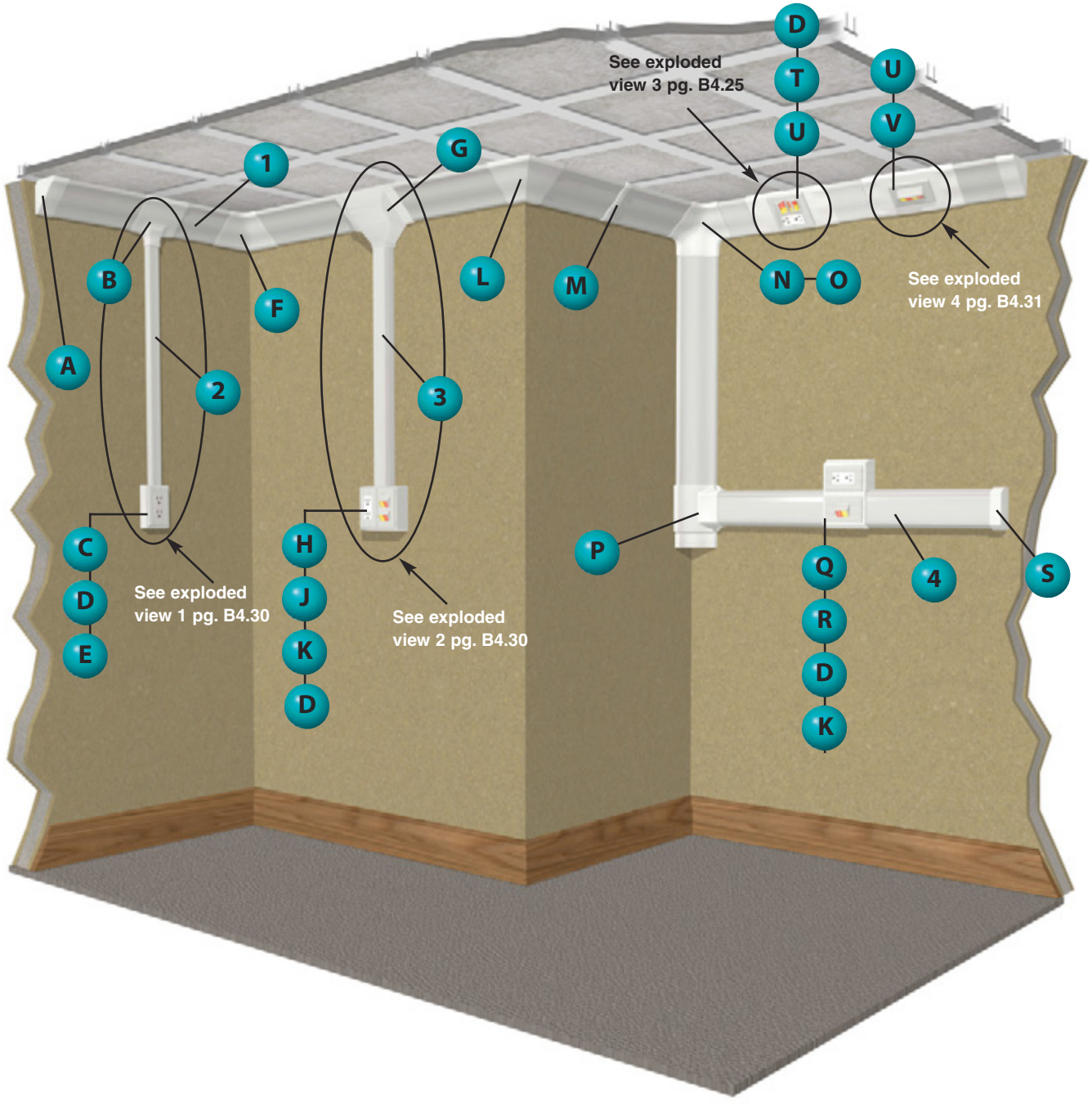
- UL and CSA rated 600 V
- Bend radius control is maintained throughout the entire system as required by TIA/EIA-568-B and 569-B
- Product mounts high out of reach for increased tamper resistance
- Divided channel system allows for routing and terminations of both power and data cabling
- Raceway and fitting covers may be painted to match any décor



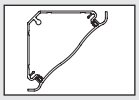
PAN-WAY® Cove Raceway includes a full complement of fittings and transitions easily to other *PANDUIT* raceway such as LD, LDPH, LD2P10, T-45 and T-70.

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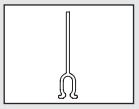
Cove Raceway Roadmap



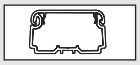
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com



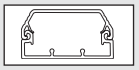
1 **WCM35BIW, WCM35CIW – Cove Raceway Base and Cover (page B4.32)**



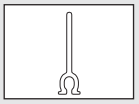
1 **WCM35DW – Cove Raceway Divider Wall (page B4.32)**



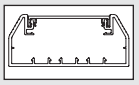
2 **LDPH10** – LDPH10 Raceway (page B4.93)**



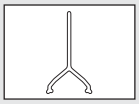
3 **T45B**, T45C** – T-45 Raceway Base and Cover (page B4.64)**



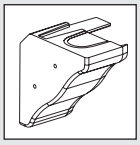
3 **T45DW – T-45 Raceway Divider Wall (page B4.64)**



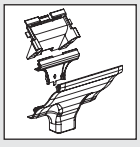
4 **T70B**, T70C** – T-70 Raceway Base and Cover (page B4.52)**



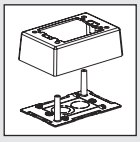
4 **T70DW – T-70 Raceway Divider Wall (page B4.52)**



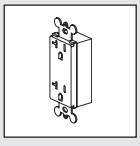
A **WCM35ECIW – Cove Raceway End Cap (page B4.33)**



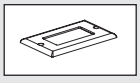
B **WCM35TR10IW – Cove Raceway Low Profile Transition Fitting for LD/LDPH10 Raceway (page B4.33)**



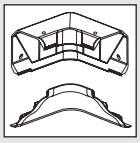
C **JBP1** – Power Rated Single Gang Two-Piece Box (page B4.75)**



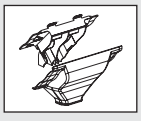
D **ERU20** – 20 A Rectangular Outlet (page B4.72)**



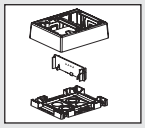
E **CPG** – Single Gang Rectangular Electrical/Communication Screw-On Faceplate (page B4.71)**



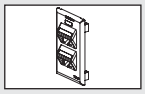
F **WCM35ICIW – Cove Raceway Inside Corner Fitting (page B4.33)**



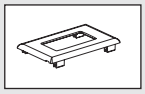
G **WCM35TRIW – Cove Raceway Transition Fitting for T-45 and LD Series Raceways (page B4.33)**



H **JBP2FS** – FAST-SNAP™ Double Gang Power Rated Surface Mount Outlet Box (page B4.76)**



J **UIT70FV4** – ULTIMATE ID® Sloped Vertical Snap-On Faceplate (page B4.68)**



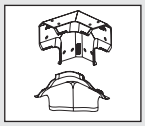
K **T70PG** – Single Gang Rectangular Electrical/Communication Snap-On Faceplate (page B4.69)**



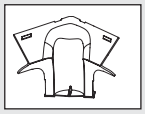
L **WCM35OCIW – Cove Raceway Outside Corner Fitting (page B4.33)**



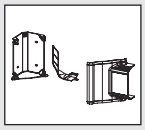
M **WCM35CCIW – Cove Raceway Cover Coupler Fitting (page B4.33)**



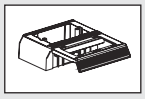
N **WCM35TIW – Cove Raceway Tee Fitting (page B4.33)**



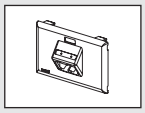
O **WCM35TI – Cove Raceway Tee Fitting Insert (page B4.33)**



P **WCM35TR70IW – Cove Raceway Low Profile Transition Fitting for T-70 Raceway (page B4.33)**



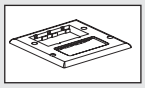
Q **T70WC2** – T-70 WORKSTATION OUTLET CENTER™ Offset Box for Snap-On Faceplates (page B4.53)**



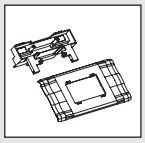
R **UIT70FH2** – ULTIMATE ID® Horizontal Snap-On Faceplate (page B4.68)**



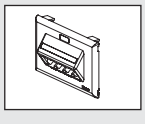
S **T70EC** – T70 Raceway End Cap Fitting (page B4.53)**



T **FP2RC** – Double Gang Rectangular Electrical and Communication Faceplate (page B4.70)**



U **WCM35DBFIW – Cove Raceway Device Box and Faceplate Adapter (page B4.33)**



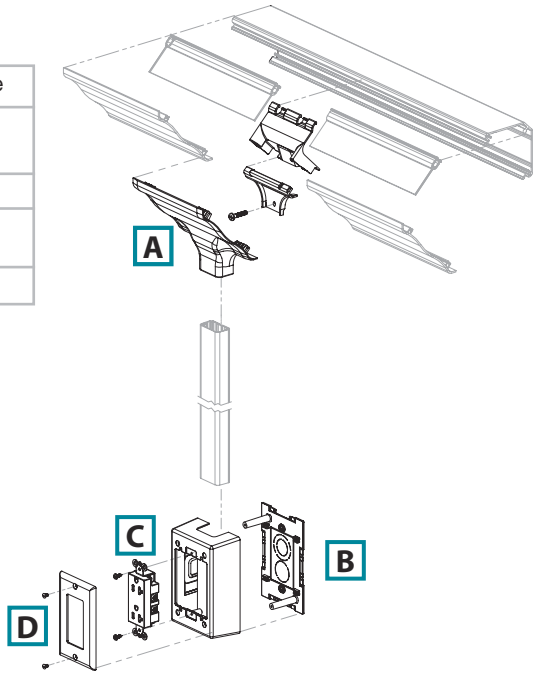
V **UIT70FH4** – ULTIMATE ID® Horizontal Snap-On Faceplate (page B4.68)**

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Cove Configurations

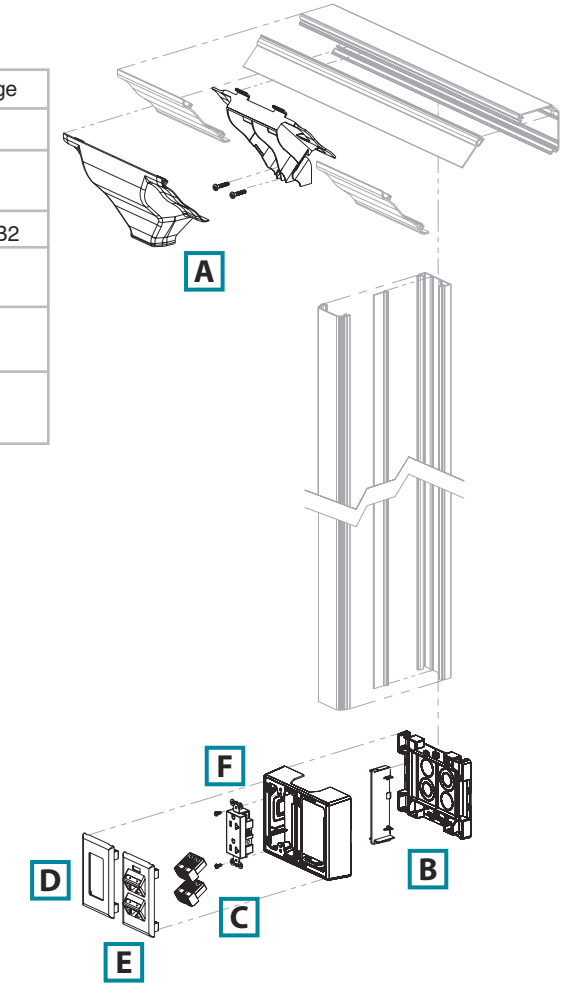
Exploded View 2

	Components Required	See page
A.	WCM35TR10 = Cove Raceway Low Profile Transition Fitting for LD/LDP10 Raceway.	B4.33
B.	JBP1 = Power Rated Single Gang Two-Piece Box.	B4.75
C.	ERU20 = 20 A Rectangular Electrical Outlet (screws included).	B4.72
D.	CPG = Screw-On Single Gang Rectangular Faceplate.	B4.71



Exploded View 2

	Components Required	See page
A.	WCM35TR = Cove Raceway Transition Fitting.	B4.33
B.	JBP2FS = *FAST-SNAP*™ Double Gang Power Rated Surface Mount Outlet Box.	B4.76
C.	*MINI-COM*® Modules.	Section B2
D.	T70PG = Single Gang Rectangular Electrical/Communication Snap-On Faceplate.	B4.69
E.	UIT70FV4 = *ULTIMATE ID*® Sloped Vertical Snap-On Faceplate.	B4.68
F.	ERU20 = 20 A Rectangular Electrical Outlet (screws included).	B4.72

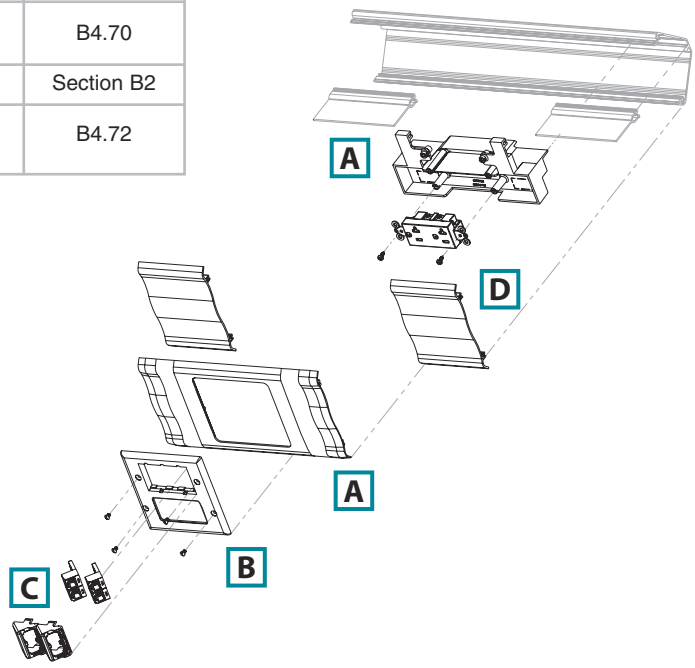


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Cove Configurations (continued)

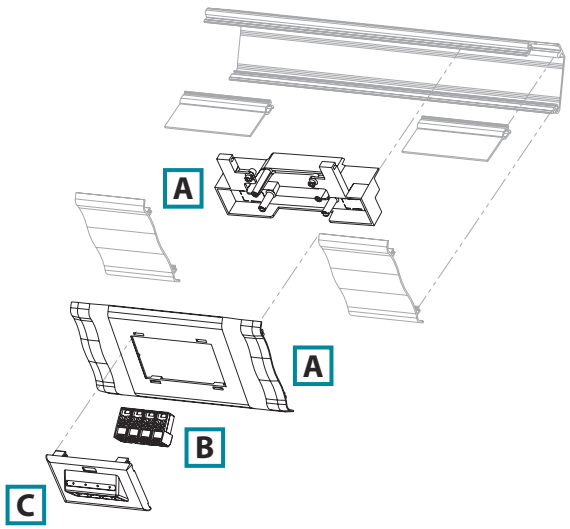
Exploded View 3

	Components Required	See page
A.	WCM35DBF = Cove Raceway Device Box and Faceplate Adapter.	B4.33
B.	FP2RC = *PAN-WAY®* Classic Series Faceplates for Power and Communication.	B4.70
C.	*MINI-COM®* Modules.	Section B2
D.	ERU20 = 20 A Rectangular Electrical Outlet (screws included).	B4.72



Exploded View 4

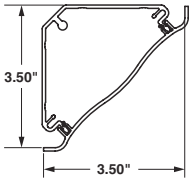
	Components Required	See page
A.	WCM35DBF = Cove Raceway Device Box and Faceplate Adapter.	B4.33
B.	*MINI-COM®* Modules.	Section B2
C.	UIT70FH4 = *ULTIMATE ID®* Horizontal Snap-On Faceplate.	B4.68



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PAN-WAY® Cove Raceway System

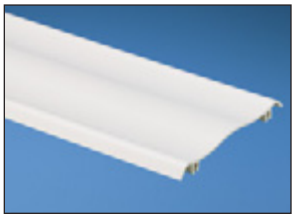
- UL and CSA rated 600 V; meets UL 5A and CSA C22.2 No. 62.1-03 standards; FT4 rated
- Bend radius control is maintained throughout the entire cove raceway system as required by TIA/EIA-568-B and 569-B
- Tamper resistant
- Transitions to *PANDUIT*® T-70, T-45, and LD profile raceway
- Cove raceway and fittings may be painted to blend with any decor
- Supplied with pre-punched mounting holes



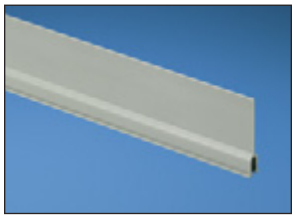
COVE RACEWAY
Internal Area = 5.40 Sq. In.
(3484 Sq. mm)



WCM35B



WCM35C



WCM35DW

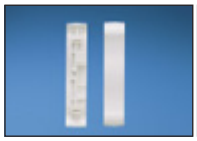
Part Number	Part Description	Raceway Size	Color‡	Length (Ft.)	Std. Ctn. Qty.
Cove Raceway Base					
WCM35BIW8	Cove raceway base is available in 8' lengths and is used for mounting in the horizontal corner between the ceiling and wall or vertical corner between walls.	3.50" x 3.50" (89.0mm x 89.0mm)	Off White	8	64
Cove Raceway Cover					
WCM35CIW8	Cove raceway cover available in 8' lengths.	—	Off White	8	64
Cove Raceway Divider Wall					
WCM35DW8	Cove raceway divider wall. Snaps onto rails in cove raceway base to create separate channels. Must use wire retainers to ensure channel separation per UL/CSA. Available in 8' lengths.	—	Gray	8	64

‡All parts available in IW (Off White) only except for WCM35DW8 which is available in Gray only.
Order number of feet required in multiples of standard carton quantity.
Order raceway base and cover separately.

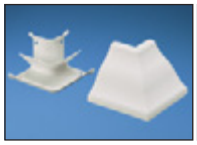
Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PAN-WAY® Cove Raceway Fittings

- Cove raceway fittings are designed to maintain the TIA/EIA-568-B and 569-B required minimum bend radius for high performance copper and fiber optic cabling systems


WCM35CC


WCM35IC


WCM35OC


WCM35T


WCM35TI


WCM35EC

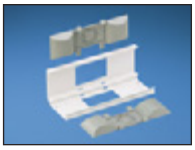

WCM35TR

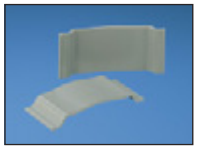

WCM35TR5


WCM35TR10


WCM35TR70


WCM35DBF


WCM35BF


WCM35WR-X

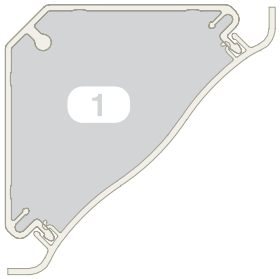
Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
WCM35CCIW-X	Cover coupler fittings. Used to join two pieces of cove raceway cover together.	Off White	10	100
WCM35ICIW	Inside corner fitting. Used to join cove raceway at inside corners. Maintains a minimum 1" bend radius of cabling.	Off White	1	10
WCM35OCIW	Outside corner fitting. Used to join cove raceway at outside corners. Maintains a minimum 1" bend radius of cabling.	Off White	1	10
WCM35TIW	Tee fitting. Used to join sections of cove raceway to form a "tee" junction. Maintains a minimum 1" bend radius of cabling.	Off White	1	10
WCM35TI	Tee fitting insert. Mounts inside cove raceway tee fitting to maintain channel separation at tee junctions. Maintains a minimum 1" bend radius of cabling.	Gray	1	10
WCM35ECIW	End cap fitting. Used to terminate or enter cove raceway. Includes breakouts for 1/2" and 3/4" conduit.	Off White	1	10
WCM35TRIW	Transition fitting. Used to transition from cove raceway to PAN-WAY® T-45 Raceway or LD Series Raceway.	Off White	1	10
WCM35TR5IW	Low profile transition fitting. Used to transition from cove raceway to LD/LDPH5.	Off White	1	10
WCM35TR10IW	Low profile transition fitting. Used to transition from cove raceway to LD/LDPH10.	Off White	1	10
WCM35TR70IW	Low profile transition fitting. Used to transition from cove raceway to T-70.	Off White	1	10
WCM35DBFIW	Device box and faceplate adapter. Used in cove raceway to install single or double gang power and/or data devices in-line. Will accept snap-on or screw-on single gang faceplate or screw-on double gang faceplate. Note: Will accept GFCI or TVSS outlets in single gang configuration only.	Off White	1	10
WCM35BFIW	Backfeed fitting. Inserts allow cable entry and exit through the back of the raceway and conduit. Breakouts include 1/2", 3/4" and 1" .	Off White	1	10
WCM35WR-X	Wire retainer. Holds wires in place. Will not interfere with cover installation.	Gray	10	—

‡All parts available in IW (Off White) only except WCM35WR-X and WCM35TI which are available in Gray only.

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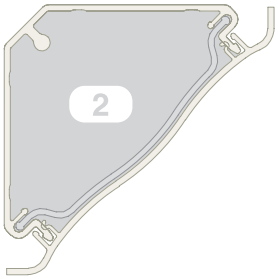
Cable Fill Capacities for Cove Raceway

This information is to be used as a guide in selecting the proper size raceway. The maximum amounts may vary according to the cable installation methods, straightness of cables, etc.



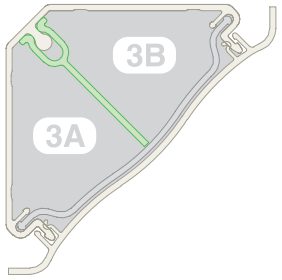
A = 5.4 in.²

Cable fill #1: Open channel without devices.



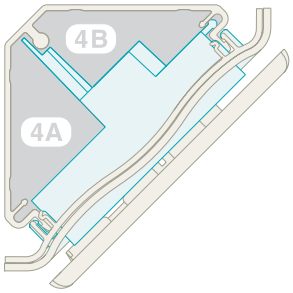
A = 5.0 in.²

Cable fill #2: Open channel with wire retainer.



3A = 2.4 in.² 3B = 2.4 in.²

Cable fill #3: Divided channel (power and data) with wire retainer and divider wall.



A = 1.6 in.² A = 1.4 in.²

Cable fill #4: Divided channel (power and data) with device box and faceplate.



A = 1.8 in.² A = 2.4 in.²

Cable fill #5: Divided channel (power and data) with low profile transition insert.

SPEC = 40% cable fill – The recommended design in cable capacity, leaves room for future moves, adds, and changes.

MAX for Data = 60% cable fill – The maximum cable quantity based on cable interweaving and packing factors.

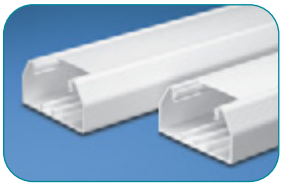
MAX for Power cable fill – The maximum of electrical cables based on UL temperature rise test.

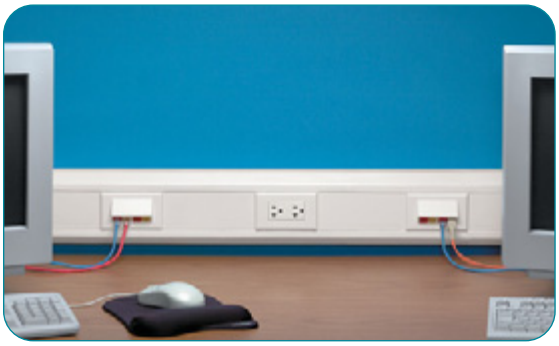
	Raceway Type and Configuration	Fill Area (In.²)	Electrical Cables			Data Grade Cables		Data Grade Cables		Audio/Video		Fiber Optic Cable	
			14 AWG	12 AWG	10 AWG	23 AWG/UTP CM		23/24 AWG/UTP		RG6		2 Strand	
			THHN/T90			Augmented Cat. 6		Cat 6. (4pr)					
			0.111	0.130	0.164	DIA. = .354		DIA. = .250		DIA. = .275		DIA. = .175	
			FILL			FILL		FILL		FILL		FILL	
			MAX	MAX	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX
			(UL Temp Rise Test)			(40%)	(60%)	(40%)	(60%)	(40%)	(60%)	(40%)	(60%)
1.	WCM35: No Devices	5.4	50	40	30	22	33	44	66	29	43	89	134
2.	WCM35: Using Wire Retainer – No Devices	5	50	40	30	20	31	40	61	26	40	83	124
3A.	WCM35: Power and Data using Wire Retainer and Divider Wall	2.4	—	—	—	9	14	19	29	13	19	39	59
3B.		2.4	30	25	20	—	—	—	—	—	—	—	—
4A.	WCM35: Power and data using Device Box and Faceplate Adapter	1.6	—	—	—	6	9	13	19	10	16	26	39
4B.		1.4	25	25	20	—	—	—	—	—	—	—	—
5A.	WCM35: Power and data using Low Profile Transition Insert	1.8	25	25	20	—	—	—	—	—	—	—	—
5B.		2.4	—	—	—	10	15	20	30	13	19	41	62

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PAN-WAY® TG-70 NON-METALLIC SURFACE RACEWAY

PAN-WAY® TG-70 Non-Metallic Surface Raceway is a multi-channel raceway, which provides a solution for routing copper, fiber optic, and/or power cabling when maximum cable capacity is required.





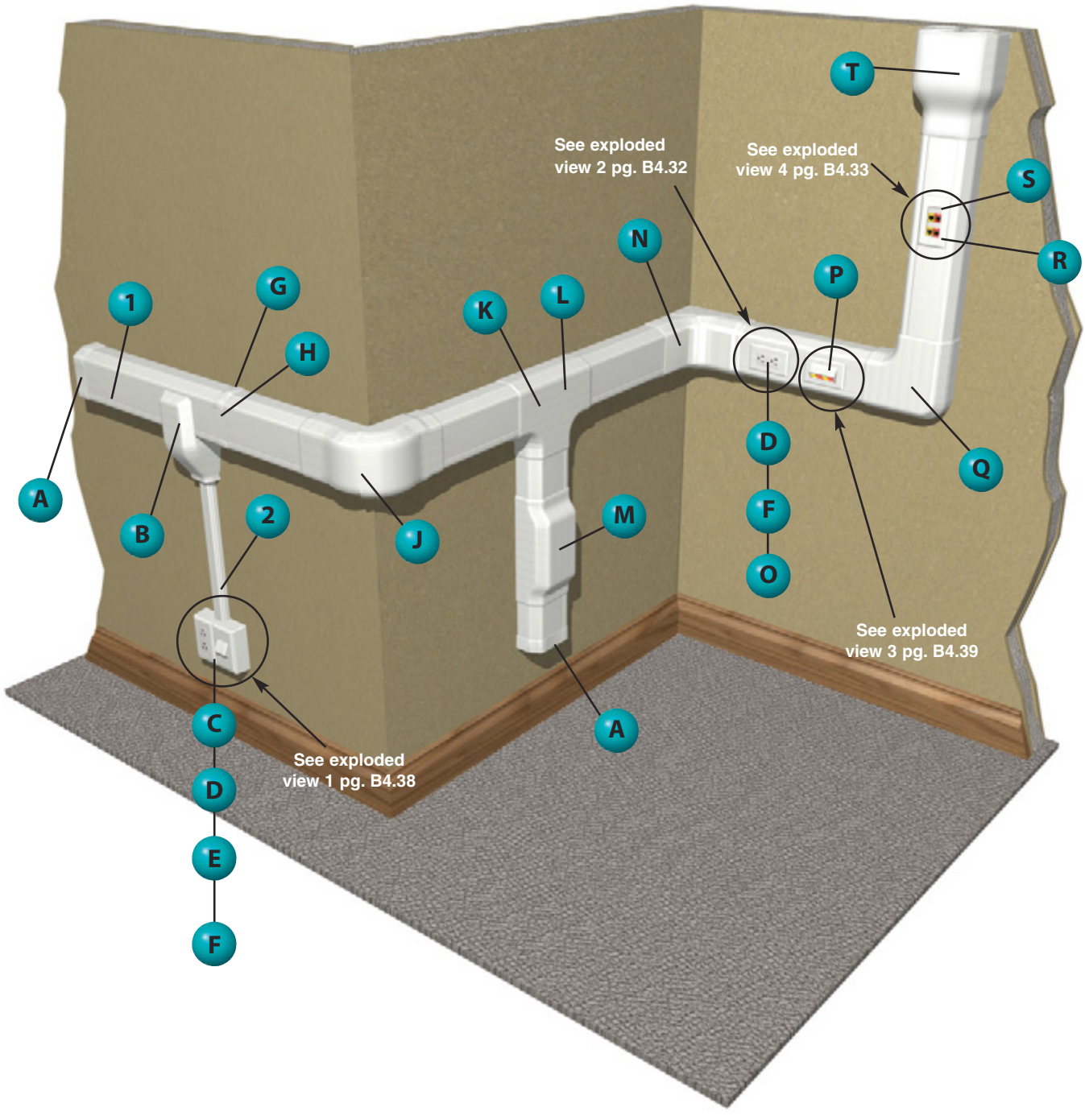


- Large raceway channel provides maximum capacity
- Fittings maintain 40mm (1.6") bend radius control
- Multi-channel two-piece design
- Aesthetically pleasing
- Lightweight
- Tamper resistant

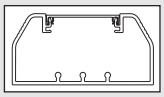
The TG-70 Raceway System consists of raceway base and cover, fittings, termination hardware and accessories. PAN-WAY® TG-70 Raceway can mount NEMA standard screw-on faceplates or superior PAN-WAY® Snap-On Faceplates directly to the channel. Fittings for TG-70 are available to transition to PAN-WAY® T-45 and LD Raceway.

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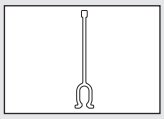
TG-70 Raceway Roadmap



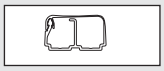
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com



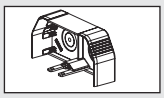
1 **TG-70** – TG-70 Raceway Base and Cover (page B4.40)**



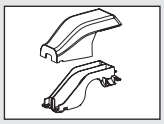
1 **TGDW – TG-70 Raceway Divider Wall (page B4.40)**



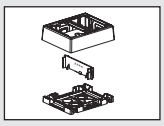
2 **LD2P10** – Raceway (page B4.91)**



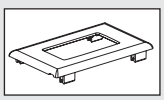
A **TGEC** – TG-70 End Cap (page B4.41)**



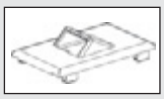
B **TGTR** – TG-70 Transition Fitting (page B4.41)**



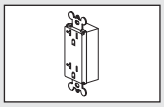
C **JBP2FS** – *FAST-SNAP*™ Double Gang Power Rated Surface Mount Box (page B4.76)**



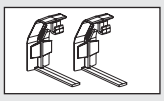
D **T70PG** – Single Gang Rectangular Electrical/ Communication Snap-On Faceplate (page B4.69)**



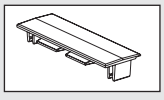
E **T70FV2** – Vertical Sloped Communication Snap-On Faceplate (page B4.69)**



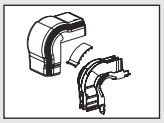
F **ERU20** – 20 A Rectangular Electrical Outlet (page B4.72)**



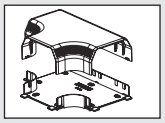
G **TG70BC** – TG-70 Base Couplers (page B4.41)**



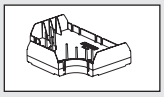
H **T70CC** – T-70 Cover Couplers (page B4.41)**



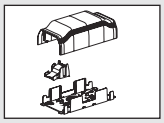
J **TGOC** — TG-70 Outside Corner Fitting (page B4.41)**



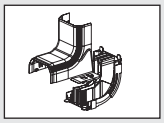
K **TGT** — TG-70 Tee Fitting (page B4.41)**



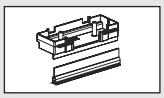
L **TGTD — TG Tee Divider (page B4.41)**



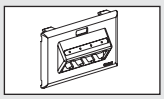
M **TGBF** — TG-70 Backfeed Fitting (page B4.41)**



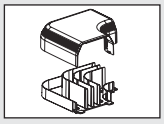
N **TGIC** — TG-70 Inside Corner Fitting (page B4.41)**



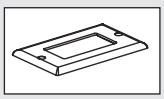
O **TG70HB3-X – TG-70 Hanging Box with Divider Wall (page B4.56)**



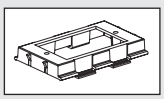
P **UIT70FH4** – *ULTIMATE ID*® Sloped Horizontal Snap-On Faceplate (page B4.68)**



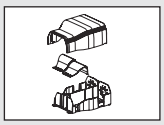
Q **TGRA** – TG-70 Right Angle Fitting (page B4.41)**



R **CPG** – Single Gang Rectangular Power and Communication Faceplate (page D4.71)**



S **T70DB-X – T-70 Device Bracket (page B4.56)**



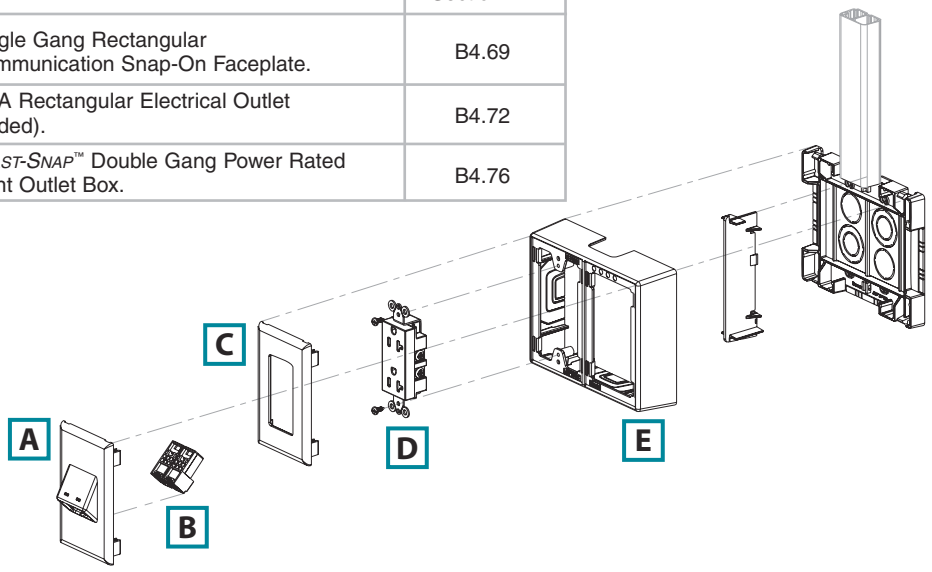
T **TGEE** – TG-70 Entrance End Fitting (page B4.41)**

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TG-70 Configurations

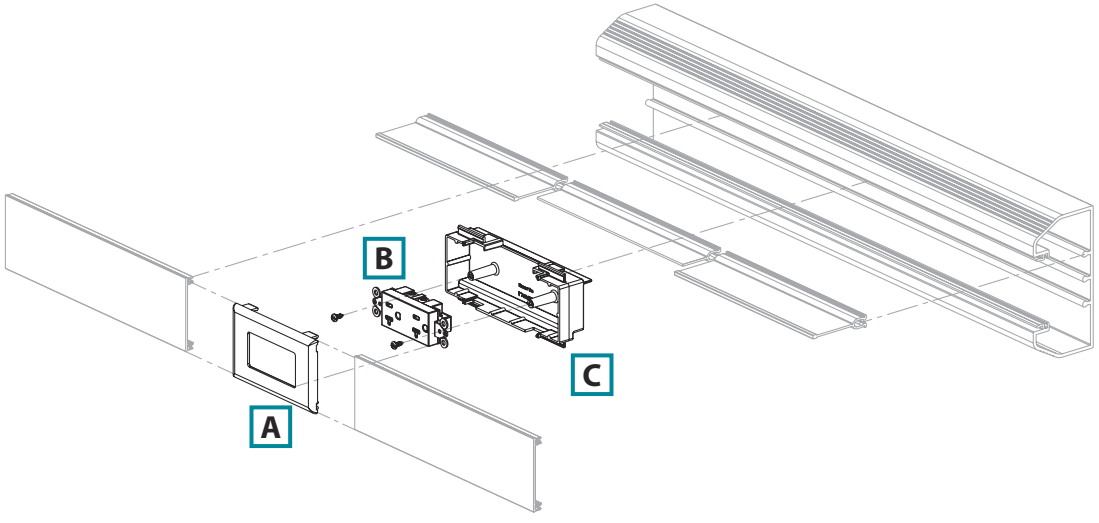
Exploded View 1

	Components Required	See page
A.	T70FV2 = Vertical Sloped Communication Snap-On Faceplate.	B4.69
B.	*MINI-COM*® Modules.	Section B2
C.	T70PG = Single Gang Rectangular Electrical/Communication Snap-On Faceplate.	B4.69
D.	ERU20 = 20 A Rectangular Electrical Outlet (screws included).	B4.72
E.	JBP2FS = *FAST-SNAP*™ Double Gang Power Rated Surface Mount Outlet Box.	B4.76



Exploded View 2

	Components Required	See page
A.	T70PG = Single Gang Rectangular Electrical/Communication Faceplate.	B4.69
B.	ERU20 = 20 A Rectangular Electrical Outlet (screws included).	B4.72
C.	TG70HB3 = TG-70 Three-Sided Hanging Box.	B4.42

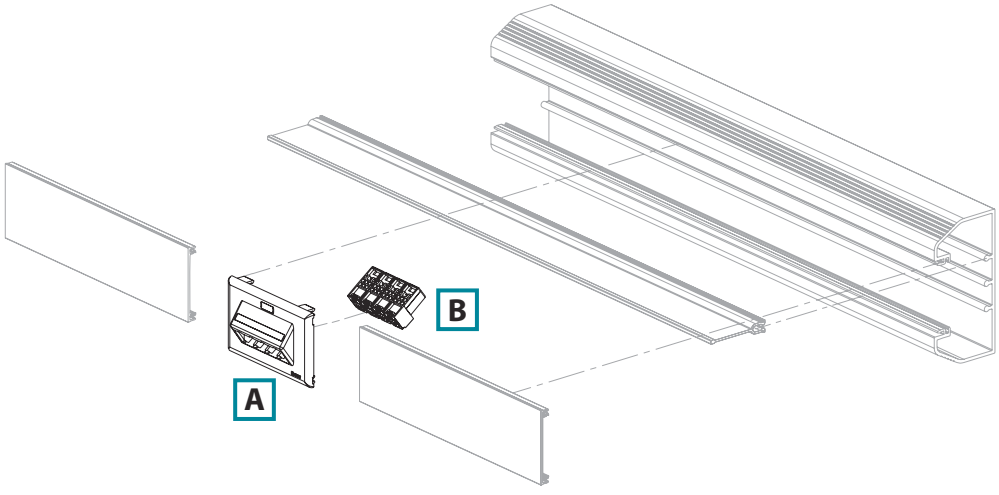


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TG-70 Configurations (continued)

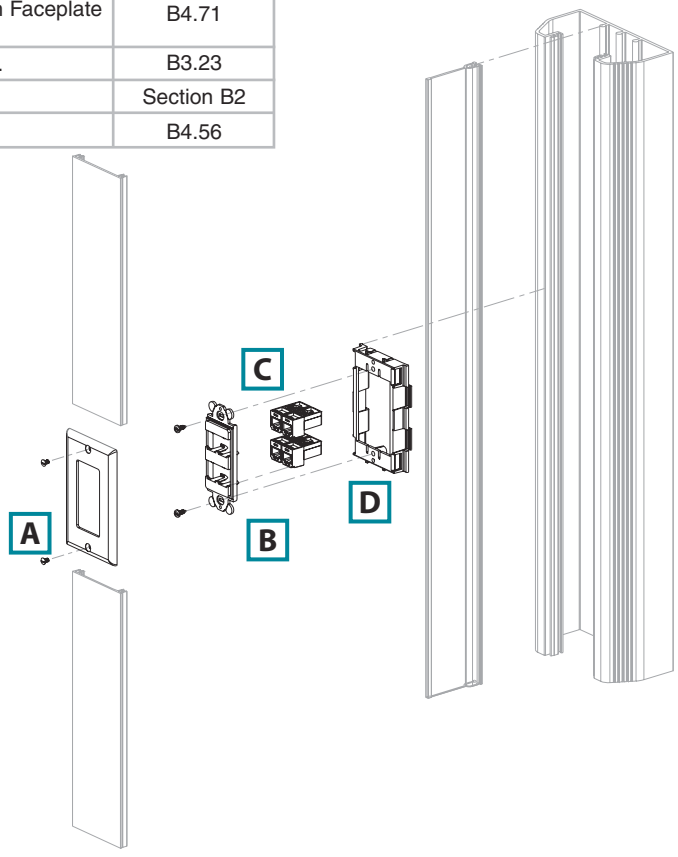
Exploded View 3

	Components Required	See page
A.	UIT70FH4 = *ULTIMATE ID*® Sloped Horizontal Snap-On Faceplate – 4-Port.	B4.68
B.	*MINI-COM*® Modules.	Section B2



Exploded View 4

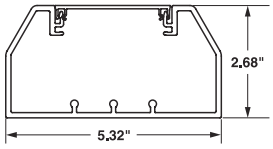
	Components Required	See page
A.	CPG = Single Gang Rectangular Screw-On Faceplate (screws included).	B4.71
B.	CFG4 = *MINI-COM*® Module Frame – 4-port.	B3.23
C.	*MINI-COM*® Modules.	Section B2
D.	T70DB = T70 Device Bracket.	B4.56



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PAN-WAY® TG-70 Surface Raceway System

- UL and CSA rated 600 V; meets UL 5A and CSA C22.2 No. 62.1-03 standards; FT4 rated
- Large cable capacity with aesthetically pleasing design
- Tamper resistant
- Compatible with NEMA standard faceplates or PAN-WAY® Classic Series Snap-On Faceplates
- Transitions to *PANDUIT* T-45 and LD profile raceway
- Supplied with pre-punched mounting holes



TG-70
Internal Area = 10.85 Sq. In.


TG70


T70C


TGDW

Part Number	Part Description	Raceway Size	Color‡	Length (ft)	Std. Ctn. Qty.
TG-70 Raceway Base and Cover – PACKAGED TOGETHER					
TG70IW8	TG-70 raceway base in 8' and 10' lengths. Supplied with pre-punched mounting holes.	5.32" x 2.68" (135.0mm x 68.0mm)	Off White	8	32
TG70IW10				10	40
T-70/TG-70/Twin-70 Raceway Cover					
T70CIW8	T-70, TG-70, or Twin-70 raceway cover in 8' and 10' lengths.	—	Off White	8	96
T70CIW10				10	120
TG Raceway Divider Wall					
TGDW8	TG raceway divider wall. Snaps onto rails in TG raceway base to create separate channels. Must use wire retainers to ensure channel separation per UL/CSA. Available in 8' and 10' lengths.	—	Gray	8	64
TGDW10				10	80

‡For other colors replace IW (Off White) with EI (Electric Ivory).
Order number of feet required in multiples of standard carton quantity.

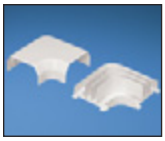
Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PAN-WAY® TG-70 Raceway Fittings

- TG-70 fittings are designed to exceed the TIA/EIA-568-B and 569-B required minimum bend radius for high performance copper and fiber optic cabling systems


T70CC


TG70BC


TGRA


TGIC


TGSIC


TGOC


TGSOC


TGT


TGTR


TGEC


TGEE


TGTD


TGBF


TGBFI

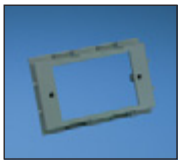
Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
T70CCIW-X	Cover coupler fitting. Used to join sections of cover together.	Off White	10	100
TG70BCIW-X	Base coupler fitting. Each piece includes two base coupler halves for joining sections of TG-70 base together.	Off White	10	—
TGRAIW	Right angle fitting. Used to join sections of TG raceway at 90° flat junctions.	Off White	1	10
TGICIW	Inside corner fitting. Used to join sections of TG raceway at inside corners. Fittings adjust from 85° to 135° to adapt to non-square corners.	Off White	1	—
TGSICIW	Inside corner fitting – non-adjustable. Used to join sections of TG raceway at inside corners.	Off White	1	10
TGOCIW	Outside corner fitting. Used to join sections of TG raceway at outside corners. Fittings adjust from 85° to 135° to adapt to non-square corners.	Off White	1	—
TGSOCIW	Outside corner fitting – non-adjustable. Used to join sections of TG raceway at inside corners.	Off White	1	10
TGTIW	Tee fitting. Used to join sections of TG raceway at tee intersections.	Off White	1	5
TGTRIW	Transition fitting from TG to T-45. Provides a tee transition from TG raceway to T-45 and LD series size 5 and 10. Use with RF5X3 reducer fitting to transition to LD series size 3.	Off White	1	10
TGECIW	End cap. Used to terminate or allow entry to TG raceway. Two knockouts each for .50" (12.7mm) and 1" (25.4mm) conduit.	Off White	1	10
TGEEIW	Entrance end fitting. Accepts large conduit, (up to 2") in line or at a right angle. Maintains a 40mm bend radius with a removable insert and channel separation.	Off White	1	10
TGTD	Tee divider insert. Mounts inside TGT tee fitting to maintain channel separation in TG raceway at tee intersections.	Gray	1	5
TGBFIW	Backfeed fitting. Features breakouts to enter through the bottom of the fitting and maintains bend radius control with a removable, bend radius insert and channel separation.	Off White	1	10
TGBFI	Backfeed fitting insert. Removable and maintains bend radius control.	Off White	1	10

‡For other colors replace IW (Off White) with EI (Electric Ivory).

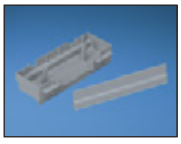
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PAN-WAY® TG-70 Raceway Accessories

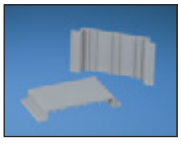
- TG-70 accessories consist of device mounting brackets, standard faceplate brackets for data, wire retainers and fiber spool brackets; the three-sided hanging box is used to mount NEMA standard single gang outlet and communications devices

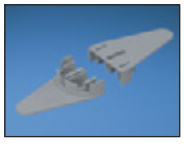

T70DB-X

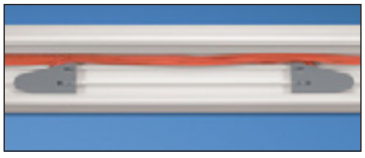

T70SDB-X


TG70HB3-X


TG70HB3GFCI-X


TG70WR-X


TGFSB

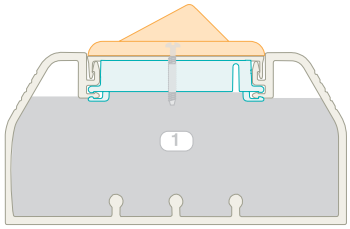

TGFSB installed in TG-70 raceway

Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
T70DB-X	Device mounting bracket. Used to mount NEMA standard single gang electrical outlets and communication devices with either screw-on or snap-on single gang faceplates. Can be used with T-70, Twin-70, and TG-70 raceway.	Gray	10	—
T70SDB-X	Standard faceplate bracket. Used to mount NEMA standard 70mm single gang screw-on faceplates. Can be used with T-70, Twin-70, TG-70 raceway and *PAN-POLE*™ Communication Pole.	Gray	10	—
TG70HB3-X	Three-sided hanging box. Mounts standard electrical outlets or communication devices with either NEMA standard single gang screw-on or *PANDUIT* snap-on faceplates. When used with TGDW divider wall, box separates and fully encloses device to provide cabling separation.	Gray	10	—
TG70HB3GFCI-X	GFCI three-sided hanging box. Accepts single gang U.S. GFCI (ground fault circuit interrupter) standard electrical devices. Provides increased internal area for connections and excess wire.	Gray	10	—
TG70WR-X	Wire retainer. Holds wires in place during installation.	Gray	10	100
TGFSB	Fiber spool bracket. Each piece consists of two halves that snap into base of TG raceway. Provides method to contain one meter or more of fiber slack and acts as a strain relief while maintaining a minimum 32mm bend radius. Bracket separation can be adjusted to fit the length of slack required.	Gray	1	10

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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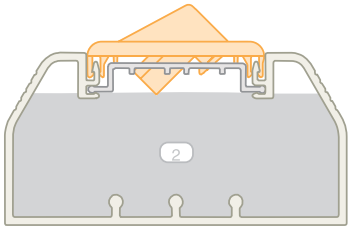
Cable Fill Capacities for TG-70 Raceway

This information is to be used as a guide in selecting the proper size raceway. The maximum amounts may vary according to the cable installation methods, straightness of cables, etc.



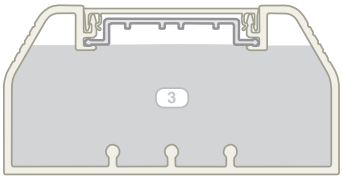
A = 10.09 in.²

Cable fill #1: With data only using screw-on faceplates and devices.



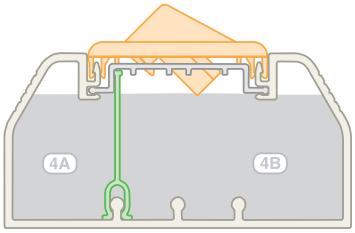
A = 10.68 in.²

Cable fill #2: With data only using snap-on faceplates and wire retainer.



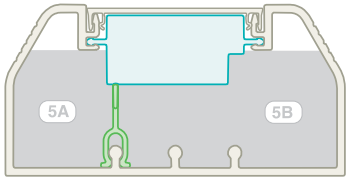
A = 10.85 in.²

Cable fill #3: With wire retainer.



A = 3.16 in.² A = 7.20 in.²

Cable fill #4: Divided (see 5A and 5B for power and data applications).



A = 3.08 in.² A = 5.58 in.²

Cable fill #5: With Power and data using snap-on faceplates and 3-sided power box.

	Raceway Type and Configuration	Fill Area (In.²)	Electrical Cables			Data Grade Cables		Data Grade Cables		Audio/Video		Fiber Optic Cable	
			14 AWG	12 AWG	10 AWG	23 AWG/UTP CM		23/24 AWG/UTP		RG6		2 Strand	
			THHN/T90			Augmented Cat. 6		Category 6 (4-pr.)					
			0.111	0.130	0.164	DIA. = .354		DIA. = .250		DIA. = .275		DIA. = .175	
			FILL			FILL		FILL		FILL		FILL	
			MAX	MAX	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX
			(UL Temp Rise Test)			(40%)	(60%)	(40%)	(60%)	(40%)	(60%)	(40%)	(60%)
1.	TG70: Data only using screw-on faceplates and devices.	10.09	—	—	—	41	62	82	123	53	80	167	251
2.	TG70: Data only using snap-on faceplates and wire retainer.	10.68	—	—	—	44	66	87	130	56	85	177	266
3.	TG70: Wire retainer without devices.	10.85	40	40	38	45	67	88	132	57	86	180	270
4A.	TG70: Divided power and data (A).	3.16	28	28	26	—	—	—	—	—	—	—	—
4B.	TG70: Divided power and data (B).	7.2	—	—	—	29	44	58	88	38	57	119	179
5A.	TG70: Power and data using snap-on faceplates and 3-sided power box (A).	3.08	28	28	26	—	—	—	—	—	—	—	—
5B.	TG70: Power and data using snap-on faceplates and 3-sided power box (B).	5.58	—	—	—	23	34	45	68	30	44	92	139

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A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

NOTES

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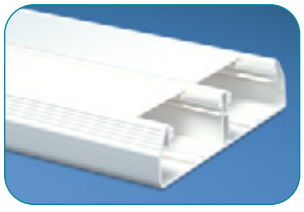
PAN-WAY® T-70 AND TWIN-70 NON-METALLIC SURFACE RACEWAY

PAN-WAY® T-70 and Twin-70 Non-Metallic Surface Raceways are multi-channel raceways which provide solutions for routing copper, fiber optic, and/or power cabling along fixed perimeter walls. T-70 features the WORKSTATION OUTLET CENTER™ Offset Box which provides an offset solution to maximize channel capacity and outlet density. Twin-70 offers two totally independent channels maintained throughout the system for independent access to power, copper, and fiber optic cabling.





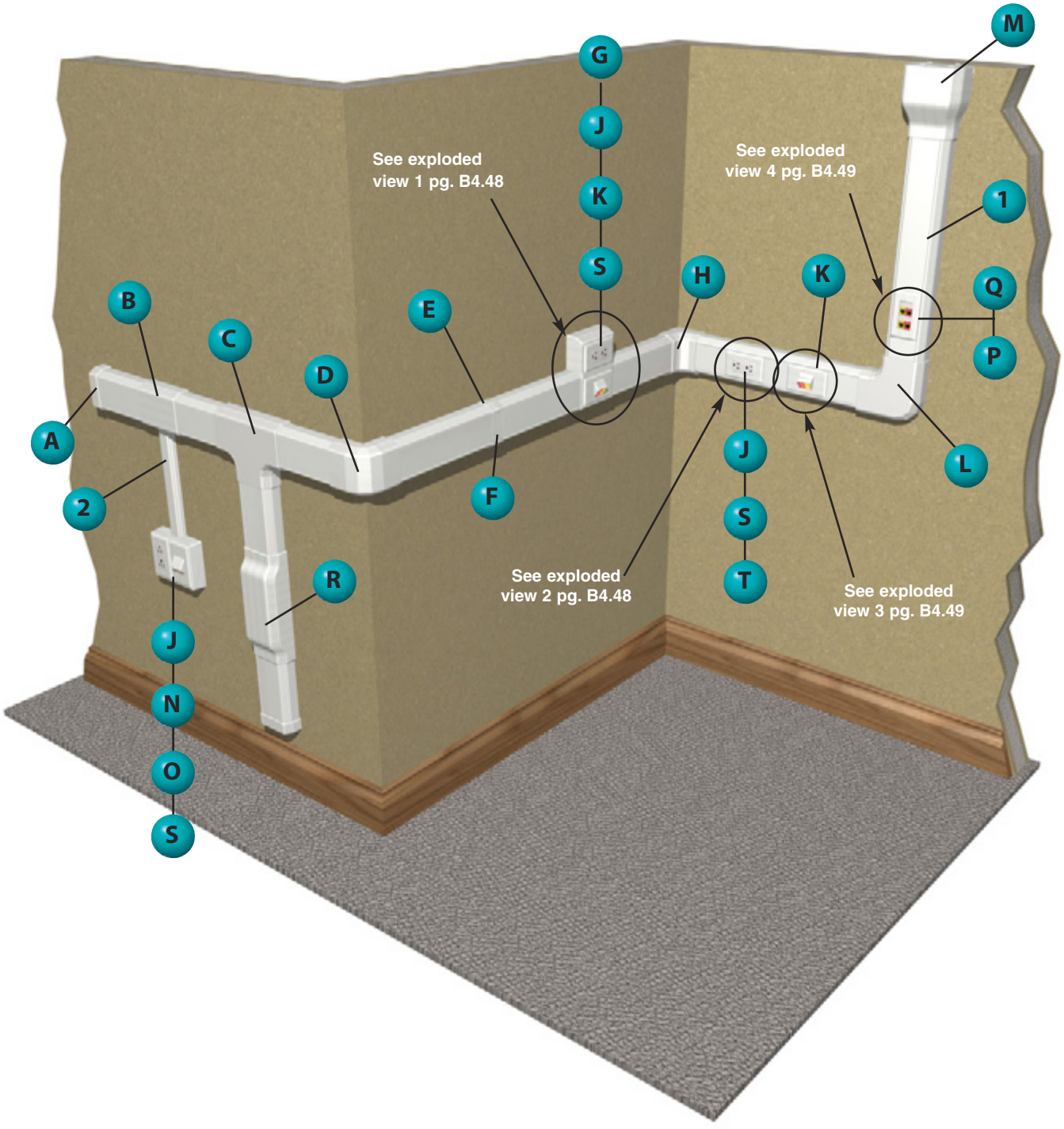
- Aesthetically pleasing
- Lightweight
- Tamper resistant
- Fittings maintain 1" bend radius control
- T-70 utilizes a single channel with snap-in divider wall to provide multi-channel capability
- Twin-70 utilizes two independent channels and covers to provide multi-channel capability



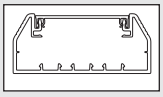
The T-70 and Twin-70 raceway systems consist of raceway base and cover, fittings, termination hardware and accessories. PAN-WAY® T-70 and Twin-70 raceway can mount NEMA standard screw-on faceplates or superior PAN-WAY® Snap-On Faceplates directly to the channel. Fittings for T-70 and Twin-70 are available to transition to T-70, Twin-70, T-45 and LD raceways.

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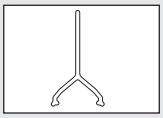
T-70 Raceway Roadmap



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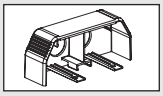
1 **T70B**, T70C** – T-70 Base and Cover (page B4.52)**



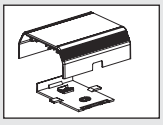
1 **T70DW – T-70 Divider Wall (page B4.52)**



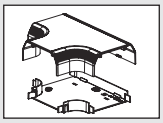
2 **LD2P10** – LD2P10 Raceway (page B4.91)**

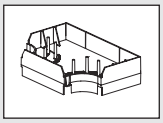


A **T70EC** – T-70 End Cap Fitting (page B4.59)**

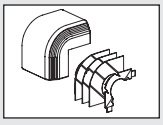


B **T70TR** – T-70 Transition Fitting (page B4.53)**

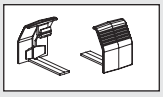




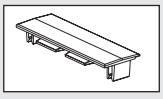
C **T70T** – T-70 Tee Fitting
T70TD – T-70 Tee Divider (page B4.53)**



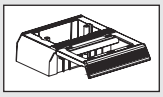
D **T70OC** – T-70 Outside Corner Fitting (page B4.53)**



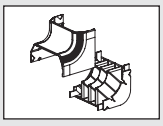
E **T70BC** – T-70 Base Coupler Fitting (page B4.52)**



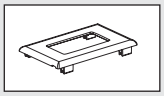
F **T70CC** – T-70 Cover Coupler Fitting (page B4.52)**



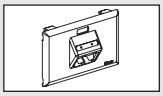
G **T70WC2** – T-70 *WORKSTATION OUTLET CENTER*™ Offset box for Snap-On Faceplates (page B4.53)**



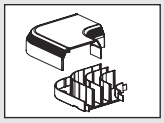
H **T70IC** – T-70 Inside Corner Fitting (page B4.52)**



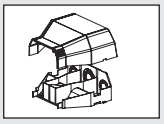
J **T70PG** – Single Gang Rectangular Electrical/ Communication Snap-On Faceplate (page B4.69)**



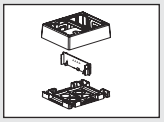
K **UIT70FH2** – *ULTIMATE ID*® Sloped Horizontal Snap-On Faceplate (page B4.68)**



L **T70RA** – T-70 Right Angle Fitting (page B4.52)**



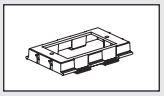
M **T70EE** – T-70 Entrance End Fitting (page B4.53)**



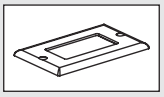
N **JBP2FS** – *FAST-SNAP*™ Double Gang Power Rated Surface Mount Outlet Box (page B4.76)**



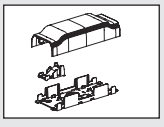
O **T70FV2** – Vertical Sloped Communication Snap-On Faceplate (page B4.69)**



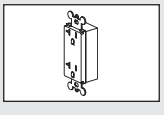
P **T70DB-X – T-70 Device Bracket (page B4.56)**



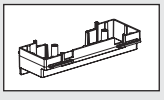
Q **CPG** – Single Gang Rectangular Screw-On Faceplate (page B4.51)**



R **T70BF** – T-70 Backfeed Fitting (page B4.53)**



S **ERU20** – 20 A Rectangular Electrical Outlet (page B4.72)**



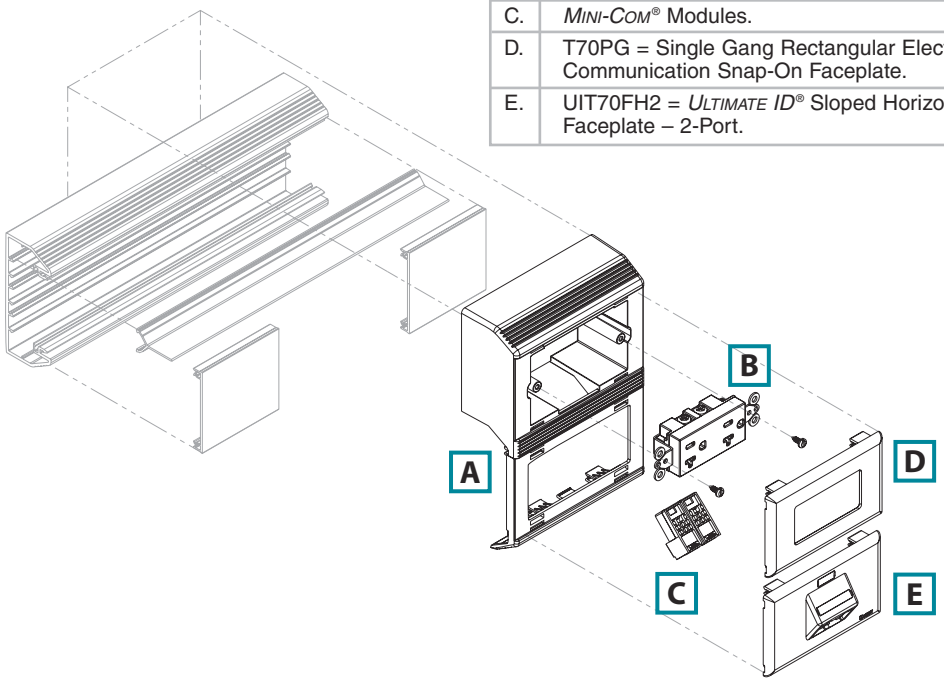
T **T70HB3-X – 3-Sided Hanging Box (page B4.56)**

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

T-70 Configurations

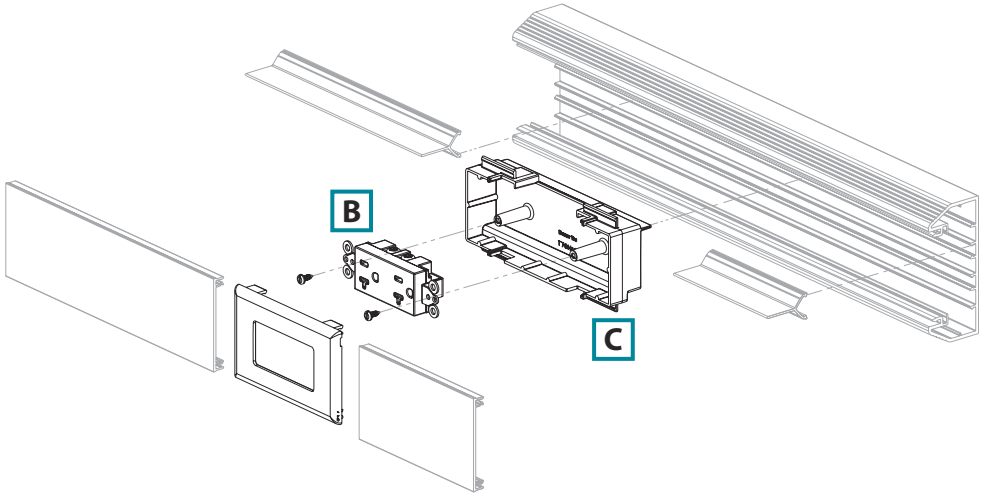
Exploded View 1

	Components Required	See page
A.	T70WC2 = T-70 *WORKSTATION OUTLET CENTER*™ Offset Box for Snap-On Faceplates.	B4.53
B.	ERU20 = 20 A Rectangular Electrical Outlet (screws included).	B4.72
C.	*MINI-COM*® Modules.	Section B2
D.	T70PG = Single Gang Rectangular Electrical/ Communication Snap-On Faceplate.	B4.69
E.	UIT70FH2 = *ULTIMATE ID*® Sloped Horizontal Snap-On Faceplate – 2-Port.	B4.68



Exploded View 2

	Components Required	See page
A.	T70PG = Single Gang Rectangular Electrical/ Communication Snap-On Faceplate.	B4.69
B.	ERU20 = 20 A Rectangular Electrical Outlet (screws included).	B4.72
C.	T70HB3-X = 3-Sided Hanging Box.	B4.56

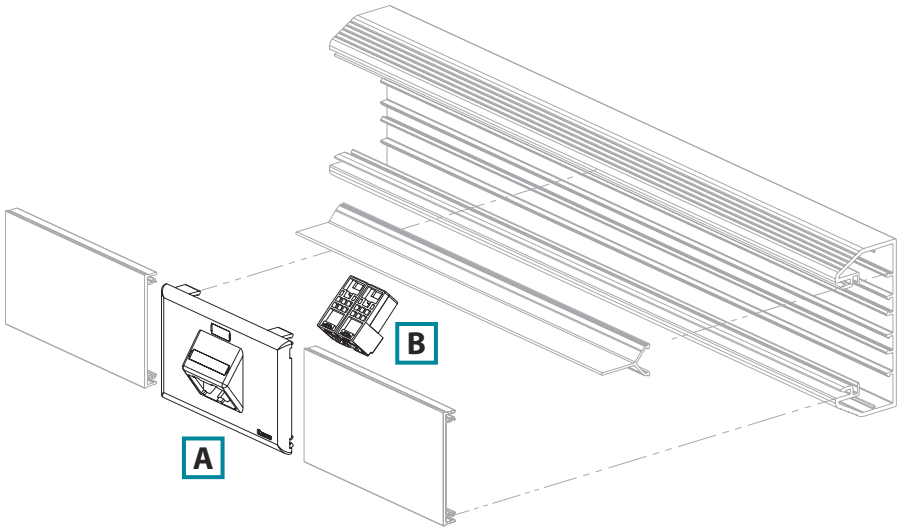


Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

T-70 Configurations (continued)

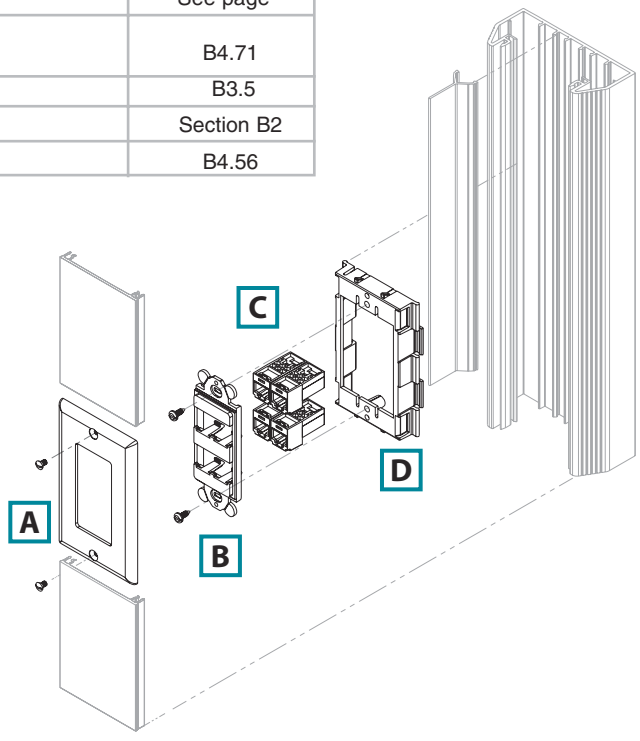
Exploded View 3

	Components Required	See page
A.	UIT70FH2 = *ULTIMATE ID*® Sloped Horizontal Snap-On Faceplate – 2-Port.	B4.68
B.	*MINI-COM*® Modules.	Section B2



Exploded View 4

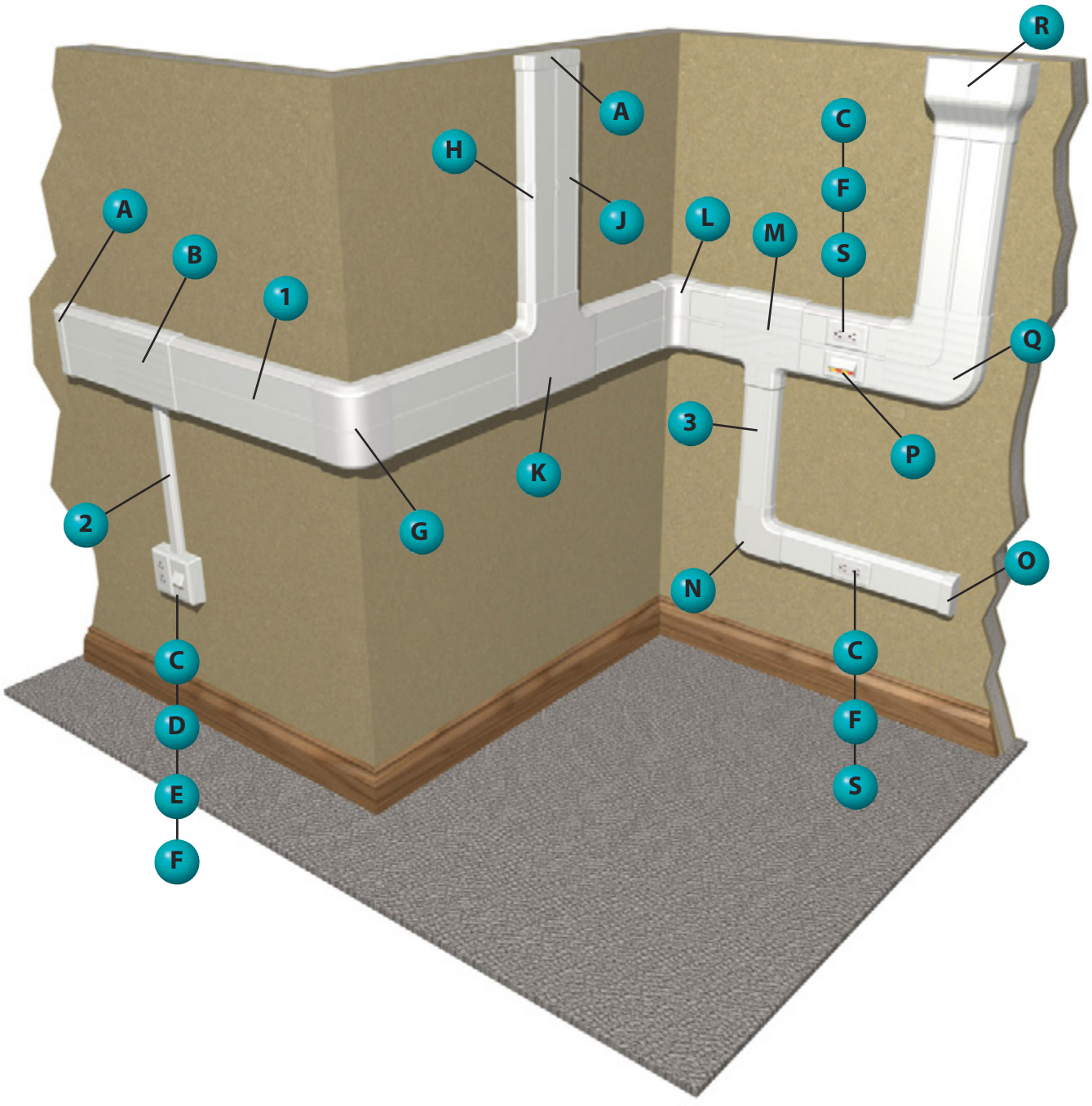
	Components Required	See page
A.	CPG = Single Gang Rectangular Screw-On Faceplates (screws included).	B4.71
B.	CFP4 = *MINI-COM*® Module Frame – 4-Port.	B3.5
B.	*MINI-COM*® Modules.	Section B2
C.	T70DB-X = T-70 Device Bracket.	B4.56



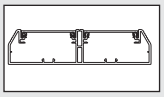
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

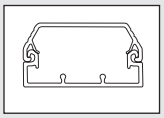
Twin-70 Raceway Roadmap



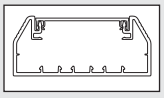
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com



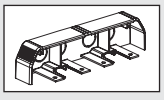
1 **T702B**, T70C** – T702 Raceway Base and Cover (page B4.54)**



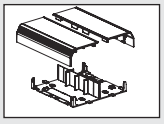
2 **T45B**, T45C** – T-45 Raceway Base and Cover (page B4.64)**



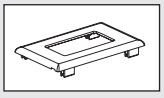
3 **T70B**, T70C** – T-70 Raceway Base and Cover (page B4.52)**



A **T702EC** – Twin-70 End Cap Fitting (page B4.55)**



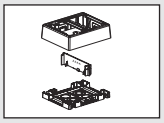
B **T702TRL** – Twin-70 Transition Fitting (page B4.55)**



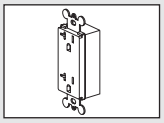
C **T70PG** – Single Gang Rectangular Electrical/ Communication Snap-On Faceplate (page B4.69)**



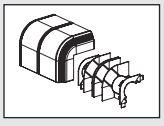
D **T70FV2** – Vertical Sloped Communication Snap-On Faceplate (page B4.69)**



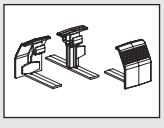
E **JBP2FS** – *FAST-SNAP*™ Double Gang Power Rated Surface Mount Outlet Box (page B4.76)**



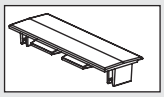
F **ERU20** – 20 A Rectangular Electrical Outlet (page B4.72)**



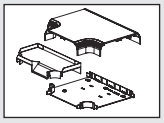
G **T702OC** – Twin-70 Outside Corner Fitting (page B4.55)**



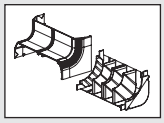
H **T702BC** – Twin-70 Base Coupler Fitting (page B4.55)**



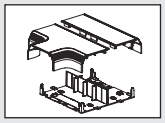
J **T70CC** – T-70 Cover Coupler Fitting (page B4.52)**



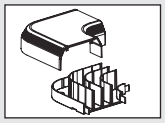
K **T702T** – Twin-70 Tee Fitting (page B4.55)**



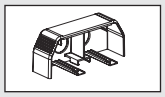
L **T702IC** – Twin-70 Inside Corner Fitting (page B4.55)**



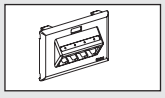
M **T702TR** – Twin-70 Transition Fitting (page B4.55)**



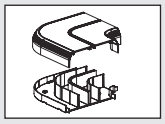
N **T70RA** – T-70 Right Angle Fitting (page B4.52)**



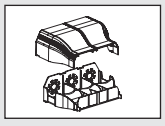
O **T70EC** – T-70 End Cap Fitting (page B4.53)**



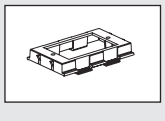
P **UIT70FH4** – *ULTIMATE ID*® Sloped Horizontal Snap-On Faceplate (page B4.68)**



Q **T702RA** – Twin-70 Right Angle Fitting (page B4.55)**



R **T702EE** – Twin-70 Entrance End Fitting (page B4.55)**

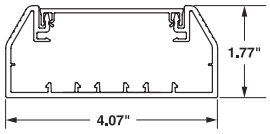


S **T70DB-X** – T-70 Device Mounting Bracket (page B4.56)**

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

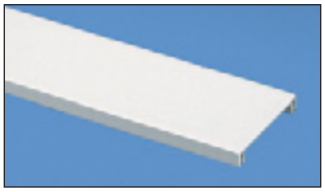
PAN-WAY® T-70 Surface Raceway System

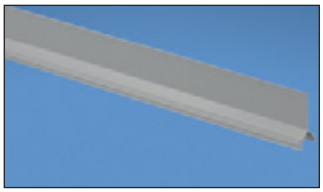
- UL and CSA rated 600 V; meets UL 5A and CSA C22.2 No. 62.1-03 standards; FT4 rated
- Large cable capacity with aesthetically pleasing design
- Tamper resistant
- Compatible with NEMA standard 70mm faceplates or PAN-WAY® Classic Series Snap-On Faceplates
- Transitions to PANDUIT® T-45 and LD profile raceway
- Supplied with pre-punched mounting holes



T-70
Internal Area = 5.15 Sq. In.


T70B


T70C


T70DW

Part Number	Part Description	Raceway Size	Color‡	Length (Ft.)	Std. Ctn. Qty.
T-70 Raceway Base					
T70BIW8	T-70 raceway base in 8' and 10' lengths. Supplied with pre-punched mounting holes.	4.07" x 1.77" (103.3mm x 45.0mm)	Off White	8	48
T70BIW10				10	60
T-70/TG-70/Twin-70 Raceway Cover					
T70CIW8	T-70, TG-70, or Twin-70 raceway cover in 8' and 10' lengths.	—	Off White	8	96
T70CIW10				10	120
T-70/Twin-70 Raceway Divider Wall					
T70DW8	T-70/Twin-70 raceway divider wall. Snaps onto rails in T-70/Twin-70 raceway base to create separate channels. Must use wire retainers to ensure channel separation per UL/CSA. Available in 8' and 10' lengths.	—	Gray	8	96
T70DW10				10	120

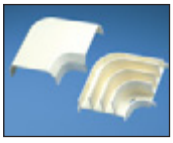
‡For other colors replace IW (Off White) with EI (Electric Ivory), WH (White) or IG (International Gray in 8' lengths ONLY).
Order raceway base and cover separately.
Order number of feet required in multiples of standard carton quantity.

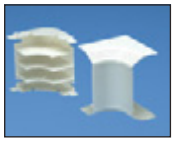
PAN-WAY® T-70 Raceway Fittings

- T-70 fittings are designed to maintain the TIA/EIA-568-B and 569-B required minimum bend radius for high performance copper and fiber optic cabling systems


T70CC


T70BC


T70RA


T70IC

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
T70CCIW-X	Cover coupler fitting. Used to join sections of cover together.	Off White	10	100
T70BCIW-X	Base coupler fitting. Used to join sections of T-70 raceway base together.	Off White	10	—
T70RAIW	Right angle fitting. Used to join sections of T-70 raceway at right angles.	Off White	1	10
T70ICIW	Inside corner fitting. Used to join sections of T-70 raceway at inside corners.	Off White	1	10

‡For other colors replace IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

PAN-WAY® T-70 Raceway Fittings (continued)


T70OC


T70T


T70TD


T70EC


T70EE


T70TR
T70TRC


T70TRI


T70WM40TR


T70BF


T70BFI


T70WC


T70WC2

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
T70OCIW	Outside corner fitting. Used to join sections of T-70 raceway at outside corners.	Off White	1	10
T70TIW	Tee fitting. Used to join sections of T-70 raceway at tee intersections.	Off White	1	10
T70TD	T-70 tee fitting divider. Separates power and data within tee fitting. Replaces T70TDB, T70TDC, and T70TDT.	Gray	1	10
T70ECIW	End cap fitting. Used to terminate or allow entry to T-70 raceway with conduit breakouts of 1/2"	Off White	1	10
T70EEIW	Entrance end fitting. Conduit breakouts of 1/2", 3/4", 1", and 1 1/4" which allows entry from ceiling or wall.	Off White	1	10
T70TRIW	Transition fitting. Used to transition to any LD profile or T-45 raceway while maintaining channel separation. Fitting includes bend radius insert.	Off White	1	10
T70TRCIW	Transition fitting cover. Used to transition to any LD profile or T-45 raceway.	Off White	1	10
T70TRI	Divided insert for T-70 to LD2P10. Maintains channel separation within T70TR fitting.	Gray	1	10
T70WM40TRIW	WIREMOLD* 4000 to T-70 transition fitting. In-line transition fitting from WIREMOLD* 4000 to T-70 raceway.	Off White	1	10
T70BFIW	Backfeed fitting. Allows cable entry through the back of the T-70 raceway	Off White	1	10
T70BFI	Backfeed fitting insert. Bend radius insert to be used with T70BF.	Gray	1	10
T70WCIW	*WORKSTATION OUTLET CENTER™* offset box for screw-on faceplates. Two-piece box and bracket accept any NEMA standard screw-on faceplate.	Off White	1	10
T70WC2IW	*WORKSTATION OUTLET CENTER™* offset box for *PAN-WAY®* Snap-On Faceplates. Two-piece box and bracket accept any standard electrical outlet. Accepts any *PAN-WAY®* Snap-On Electrical/Communication Faceplates.	Off White	1	10

‡For other colors replace IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).

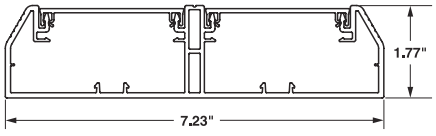
*WIREMOLD is a registered trademark of the Wiremold Co.

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A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

PAN-WAY® Twin-70 Surface Raceway System

- UL and CSA rated 600 V; meets UL 5A and CSA C22.2 No. 62.1-03 standards; FT4 rated
- Separate channels allow independent access to power and communication cabling throughout the entire system
- Transitions to *PANDUIT* T-70, T-45, and LD profile raceway
- Compatible with NEMA standard 70mm faceplates or PAN-WAY® Classic Series Snap-On Faceplates
- Tamper resistant
- Supplied with pre-punched mounting holes



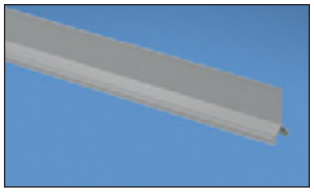
TWIN-70
Left Internal Area = 4.59 Sq. In.
Right Inrenal Area = 4.59 Sq. In.



T702B



T70C



T70DW

Part Number	Part Description	Raceway Size	Color‡	Length (Ft.)	Std. Ctn. Qty.
Twin-70 Raceway Base					
T702BIW8	Twin-70 raceway base in 8' and 10' foot lengths. Supplied with pre-punched mounting holes.	7.23" x 1.77" (184.0mm x 45.0mm)	Off White	8	24
T702BIW10				10	30
T-70/TG-70/Twin-70 Raceway Cover					
T70CIW8	T-70, TG-70, or Twin-70 raceway cover in 8' and 10' lengths.	—	Off White	8	96
T70CIW10				10	120
T-70/Twin-70 Raceway Divider Wall					
T70DW8	T-70/Twin-70 raceway divider wall. Snaps onto rails in T-70/Twin-70 raceway base to create separate channels. Must use wire retainers to ensure channel separation per UL/CSA. Available in 8' and 10' lengths.	—	Gray	8	96
T70DW10				10	120

‡ For other colors replace IW (Off White) with EI (Electric Ivory) or WH (White).
Two feet of cover needed for every foot of Twin-70 base.
Order number of feet required in multiples of standard carton quantity.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PAN-WAY® Twin-70 Raceway Fittings

- Twin-70 fittings are designed to maintain the TIA/EIA-568-B and 569-B required minimum bend radius for high performance copper and fiber optic cabling systems


T70CC


T702BC


T702RA


T702IC

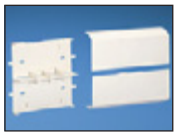

T702OC


T702T


T702EC


T702EE


T702TR


T702TRL


T702TRI

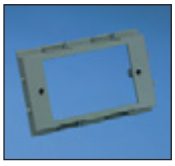
Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
T70CCIW-X	Cover coupler fitting. Used to join sections of cover together.	Off White	10	100
T702BCIW-X	Base coupler fitting. Used for joining sections of Twin-70 base together.	Off White	10	—
T702RAIW	Right angle fitting. Used to join sections of Twin-70 raceway at 90° flat junctions.	Off White	1	10
T702ICIW	Inside corner fitting. Used to join sections of Twin-70 raceway at inside corners.	Off White	1	10
T702OCIW	Outside corner fitting. Used to join sections of Twin-70 raceway at outside corners.	Off White	1	10
T702TIW	Tee fitting. Used to join sections of Twin-70 raceway at tee intersections.	Off White	1	5
T702ECIW	End cap fitting. Conduit breakouts of 1/2" for entry into raceway channel.	Off White	1	10
T702EEIW	Entrance end fitting. Conduit breakouts of 1/2", 3/4 " ,1", 1 1/4" and 1 1/2" for entry from ceiling or wall.	Off White	1	5
T702TRIW	Transition fitting. Used to transition to T-70 raceway.	Off White	1	5
T702TRLIW	Transition fitting. Used to transition to any LD profile or T-45 raceway.	Off White	1	5
T702TRI	Transition divider insert for Twin-70 to T-70 or Twin-70 to LD profile. Maintains channel separation within T702TR or T702TRL fittings.	Gray	1	10

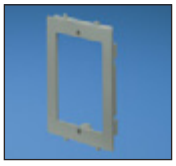
‡For other colors replace IW (Off White) with EI (Electric Ivory) or WH (White). T702TRI available in Gray only.

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PAN-WAY® T-70 and Twin-70 Raceway Accessories

- T-70 and Twin-70 accessories consist of device mounting brackets, snap-on device brackets, hanging boxes and 3-sided hanging boxes used to mount NEMA standard single gang electrical outlets and or communication devices

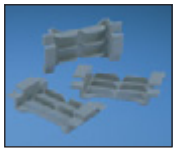

T70DB-X

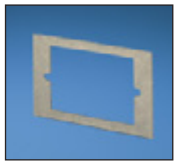

T70SDB-X

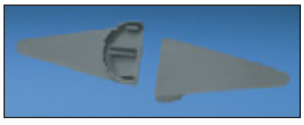

T70HB-X


T70HB3-X


T70HB3GFCI-X


T70WR-X


T70S-X


T70FSB

Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
T70DB-X	Device mounting bracket. Used to mount NEMA standard single gang electrical outlets and communication devices with either screw-on or snap-on single gang faceplates. Can be used with T-70, Twin-70, and TG-70 raceway.	Gray	10	—
T70SDB-X	Standard faceplate bracket. Used to mount NEMA standard 70mm single gang screw-on faceplates. Can be used with T-70, Twin-70, TG-70 raceway and *PAN-POLE*™ Communication Pole.	Gray	10	—
T70HB-X	Hanging box. Used to mount NEMA standard single gang electrical outlets and devices with either screw-on or snap-on single gang faceplates when there are communications cables in the raceway. For use in T-70 and Twin-70 raceway only.	Gray	10	—
T70HB3-X	Three-sided hanging box. Used to mount NEMA standard single gang electrical outlets and devices with either screw-on or snap-on single gang faceplates when there are communications cables in the raceway. Box is low profile for increased channel capacity and does not require breakout removal. For use with T-70 and Twin-70 raceway only.	Gray	10	—
T70HB3GFCI-X	T70 GFCI 3-sided hanging box. Accepts single gang U.S. GFCI (ground fault circuit interrupter) standard electrical devices. Provides increased internal area for connections and excess wire.	Gray	10	—
T70WR-X	Wire retainer. Holds wires in place during installation.	Gray	10	100
T70S-X	Spacer plate. Used to mount the CBX4 surface mount box onto the T70DB-X or T70HB-X/T70HB3-X.	—	10	—
T70FSB	Fiber spool bracket. Each piece consists of two halves that snap into base of T-70 or Twin-70 raceway. Provides method to contain one meter or more of fiber slack and acts as a strain relief while maintaining a minimum 30mm bend radius. Bracket separation can be adjusted to fit the length of slack required.	Gray	1	10

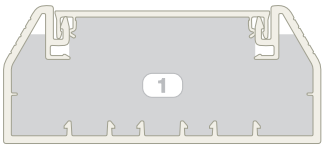

Use the T70FSB with T-70 or Twin-70 raceway to contain 1m or more of fiber slack while maintaining a 30mm cable bend radius. Brackets are adjustable for slack length.


Use T70S-X spacer plate for mounting the CBX4 surface mount box on T-70 or T702.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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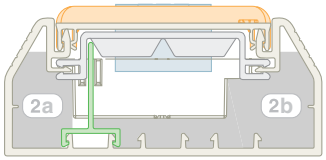
Cable Fill Capacities for T-70 Raceway

This information is to be used as a guide in selecting the proper size raceway. The maximum amounts may vary according to the cable installation methods, straightness of cables, etc.



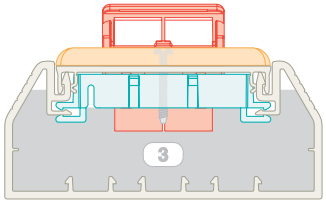
A = 5.15 in.²

Cable fill #1: Raceway with no devices.



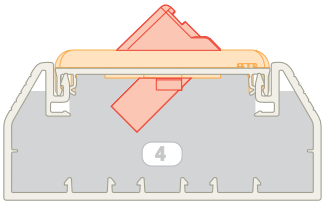
A = .86 in.² A = 1.72 in.²

Cable fill #2: Power and data using 3-sided hanging box and device bracket.



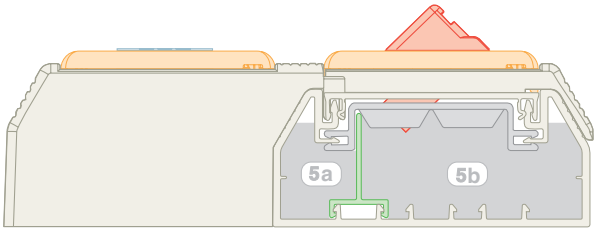
A = 3.67 in.²

Cable fill #3: Data only using vertical sloped screw-on communication faceplates.



A = 4.71 in.²

Cable fill #4: Data only using horizontal sloped snap-on communication faceplates.



A = .91 in.² A = 3.12 in.²

Cable fill #5: Power and data using the *WORKSTATION OUTLET CENTER*™ Offset Box.

SPEC = 40% cable fill – The recommended design in cable capacity, leaves room for future moves, adds, and changes.

MAX for Data = 60% cable fill – The maximum cable quantity based on cable interweaving and packing factors.

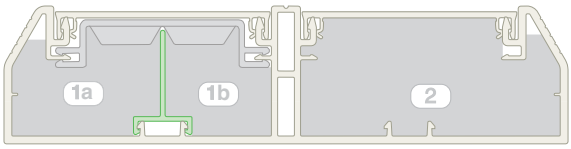
MAX for Power cable fill – The maximum of electrical cables based on UL temperature rise test.

	Raceway Type and Configuration	Fill Area (In.²)	Electrical Cables			Data Grade Cables		Data Grade Cables		Audio/Video		Fiber Optic Cable	
			14 AWG	12 AWG	10 AWG	23 AWG/UTP CM		23/24 AWG/UTP		RG6		2 Strand	
			THHN/T90			Augmented Cat. 6		Category 6 (4pr)					
			0.111	0.130	0.164	DIA. = .354		DIA. = .250		DIA. = .275		DIA. = .175	
			FILL			FILL		FILL		FILL		FILL	
			MAX	MAX	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX
			(UL Temp Rise Test)			(40%)	(60%)	(40%)	(60%)	(40%)	(60%)	(40%)	(60%)
1.	T-70: No devices.	5.15	24	20	15	21	32	41	62	27	41	85	128
2a.	T-70: Power and data using the 3-sided hanging box and device bracket.	.86	14	11	7	—	—	—	—	—	—	—	—
2b.		1.72	—	—	—	7	10	14	21	9	14	28	42
3.	T-70: Data only (screw-on faceplates).	3.67	—	—	—	15	22	29	44	19	29	61	91
4.	T-70: Data only (snap-on faceplates).	4.71	—	—	—	19	29	38	57	25	37	78	117
5a.	T-70: Power and data using the *WORKSTATION OUTLET CENTER*™ Offset Box.	.91	14	11	7	—	—	—	—	—	—	—	—
5b.		3.12	—	—	—	12	19	25	38	17	25	51	77

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Cable Fill Capacities for Twin-70 Raceway

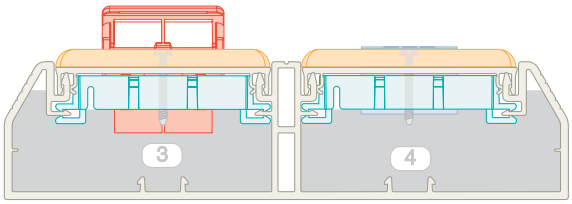
This information is to be used as a guide in selecting the proper size raceway. The maximum amounts may vary according to the cable installation methods, straightness of cables, etc.



A = 2.05 in.² | A = 1.43 in.² | A = 4.59 in.²

Cable fill #1: Power and data with no devices.

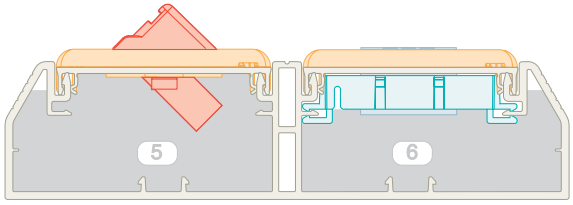
Cable fill #2: One Twin-70 channel with no devices.



A = 3.11 in.² | A = 3.32 in.²

Cable fill #3: Data only using vertical sloped screw-on communication faceplates.

Cable fill #4: Power using device bracket and NEMA standard 70mm screw-on faceplates.



A = 4.14 in.² | A = 2.33 in.²

Cable fill #5: Data only using horizontal sloped snap-on communication faceplates.

Cable fill #6: 20A TVSS rectangular outlet using device bracket and snap-on electrical/communication faceplate.

SPEC = 40% cable fill – The recommended design in cable capacity, leaves room for future moves, adds, and changes.

MAX for Data = 60% cable fill – The maximum cable quantity based on cable interweaving and packing factors.

MAX for Power cable fill – The maximum of electrical cables based on UL temperature rise test.

	Raceway Type and Configuration	Fill Area (In.²)	Electrical Cables			Data Grade Cables		Data Grade Cables		Audio/Video		Fiber Optic Cable	
			14 AWG	12 AWG	10 AWG	23 AWG/UTP CM		23/24 AWG/UTP		RG6		2 Strand	
			THHN/T90			Augmented Cat. 6		Category 6 (4pr)					
			0.111	0.130	0.164	DIA. = .354		DIA. = .250		DIA. = .275		DIA. = .175	
			FILL			FILL		FILL		FILL		FILL	
			MAX	MAX	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX
			(UL Temp Rise Test)			(40%)	(60%)	(40%)	(60%)	(40%)	(60%)	(40%)	(60%)
1a.	Twin-70: Power and data, no terminations	2.05	—	—	—	8	12	16	25	11	16	34	51
1b.		1.43	16	16	15	—	—	—	—	—	—	—	—
2.	Twin-70: One channel no devices (data).	4.59	—	—	—	19	28	37	56	24	36	76	114
3.	Twin-70: Data only (screw-on faceplate).	3.11	—	—	—	12	19	25	38	16	25	51	77
4.	Twin-70: Power only (screw-on faceplate).	3.32	15	13	13	—	—	—	—	—	—	—	—
5.	Twin-70: Data only (snap-on faceplate).	4.14	—	—	—	17	25	33	50	22	33	68	103
6.	Twin-70: TVSS power (snap-on faceplate).	2.33	16	16	14	—	—	—	—	—	—	—	—

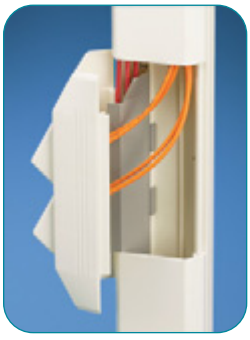
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PAN-WAY® T-45 NON-METALLIC SURFACE RACEWAY

PAN-WAY® T-45 Non-Metallic Surface Raceway is a multi-channel raceway which provides a solution for routing copper, fiber optic, and/or power cabling along fixed perimeter walls. T-45 surface raceway terminates using the T-45 hinged data and power brackets, T-45 offset box and select PAN-WAY® Surface Mount Outlet Boxes.





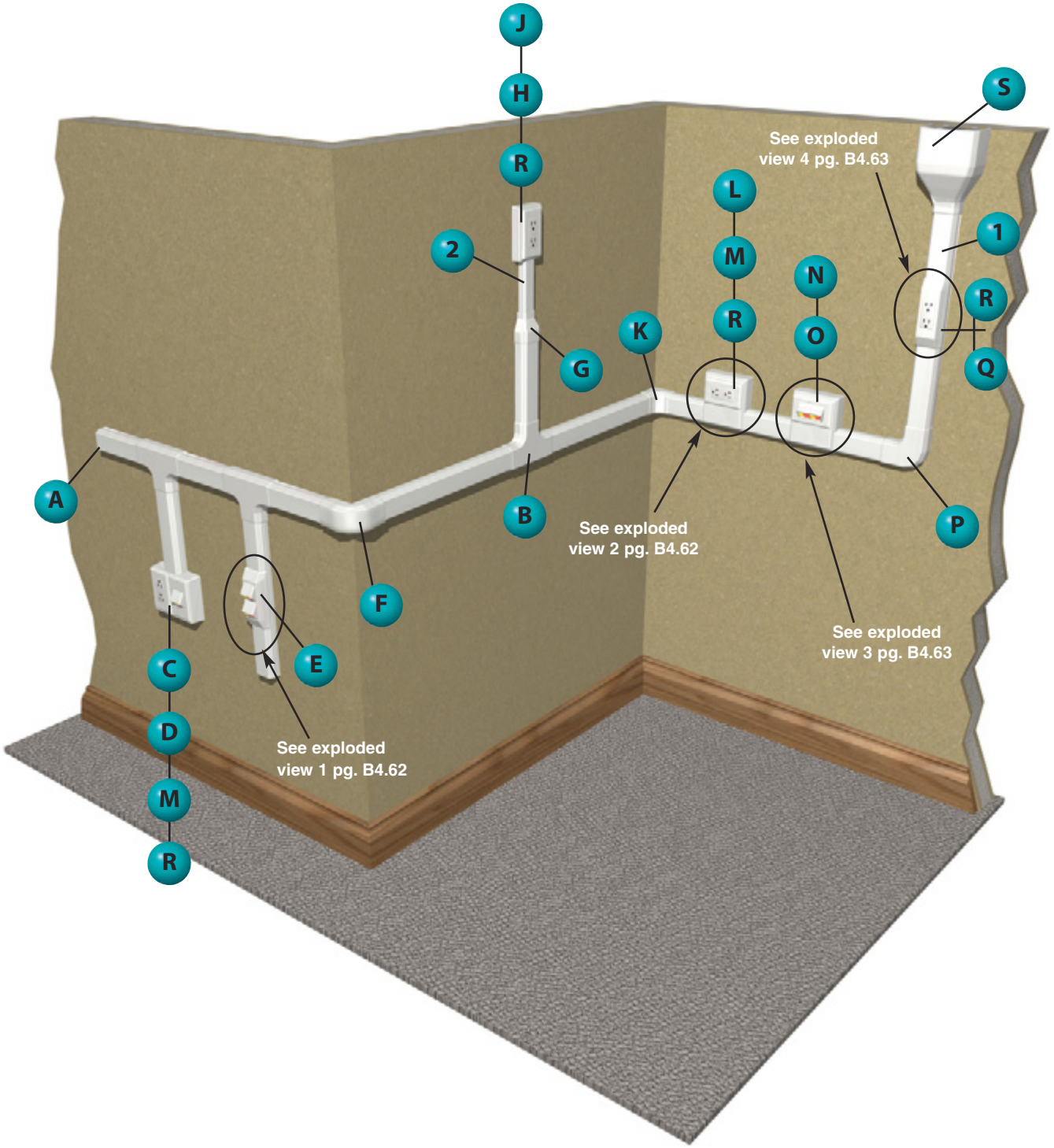


- Multi-directional cover hinge allows cable installation from either side
- Hinged data and power brackets provide easy access for terminating outlets
- Aesthetically pleasing
- Lightweight
- Tamper resistant
- Fittings maintain 1" bend radius control

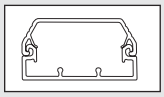
PAN-WAY® T-45 Surface Raceway accepts NEMA standard screw-on faceplates for superior PAN-WAY® Snap-On Faceplates when terminating with the T-45 offset box and surface mount outlet boxes. Fittings for T-45 are available to transition to PAN-WAY® LD Series Raceway.

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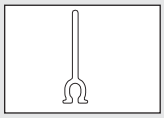
T-45 Raceway Roadmap



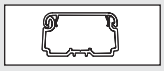
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1 **T45B**, T45C** – T-45 Raceway (page B4.64)**



1 **T45DW** – T-45 Divider Wall (page B4.64)**



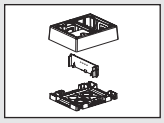
2 **LDPH10** – LDPH Raceway (page B4.93)**



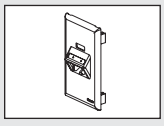
A **T45EC** – T-45 End Cap Fitting (page B4.65)**



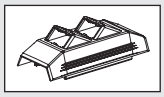
B **T45T** and T45TD – T-45 Tee Fitting and Divider (page B4.65)**



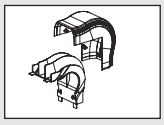
C **JBP2FS** – *FAST-SNAP*™ Double Gang Power Rated Surface Mount Outlet Box (page B4.76)**



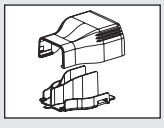
D **UIT70FV2** – *ULTIMATE ID*® Sloped Vertical Snap-On Faceplate (page B4.68)**



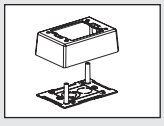
E **T45HDB** – T-45 Snap-On Hinged Data Bracket (page B4.66)**



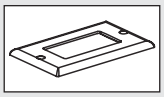
F **T45OC** – T-45 Outside Corner Fitting (page B4.65)**



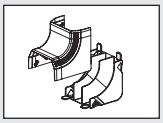
G **T45RLD** – T-45 Reducer Fitting (page B4.65)**



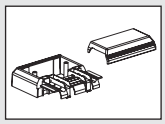
H **JBP1** – Power Rated Single Gang Two-Piece Box (page B4.64)**



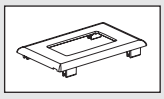
J **CPG** – Single Gang Rectangular Electrical/Communication Screw-On Faceplate (page A4.61)**



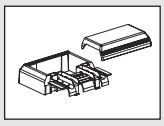
K **T45IC** – T-45 Inside Corner Fitting (page B4.65)**



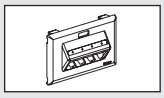
L **T45WC** – T-45 Offset Box for Screw-On Faceplates/Receptacles (page B4.65)**



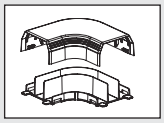
M **T70PG** – Single Gang Rectangular Electrical/Communication Snap-On Faceplate (page B4.69)**



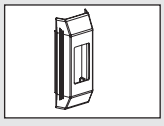
N **T45WC2** – T-45 Offset Box for Snap-On Faceplates (page B4.65)**



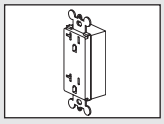
O **UIT70FH4** – *ULTIMATE ID*® Sloped Horizontal Snap-On Faceplate (page B4.68)**



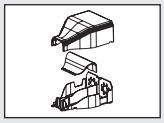
P **T45RA** – T-45 Right Angle Fitting (page B4.65)**



Q **T45HEGB** – T-45 Electrical Bracket (page B4.65)**



R **ERU20** – 20 A Rectangular Electrical Outlet (page B4.72)**



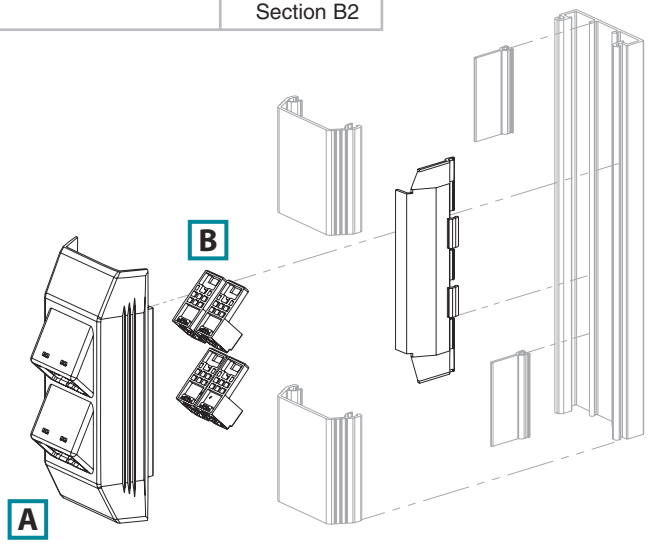
S **T45EE** – T-45 Entrance End Fitting (page B4.65)**

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T-45 Configurations

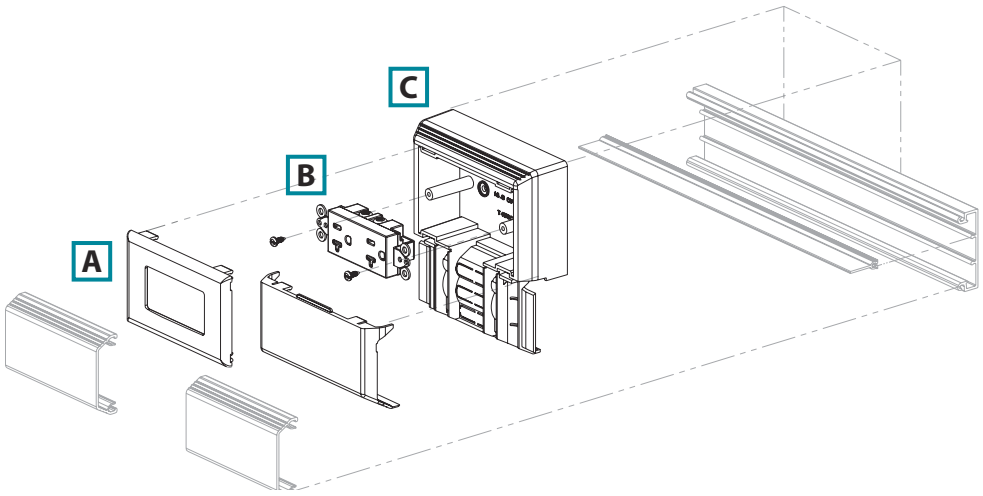
Exploded View 1

	Components Required	See page
A.	T45HDB = T-45 Snap-On Hinged Data Bracket.	B4.65
B.	*MINI-COM®* Modules.	Section B2



Exploded View 2

	Components Required	See page
A.	T70PG = Single Gang Rectangular Electrical/Communication Snap-On Faceplate.	B4.69
B.	ERU20 = 20 A Rectangular Electrical Outlet (screws included).	B4.72
C.	T45WC = T-45 Offset Box for Screw-On Faceplates/Receptacles.	B4.65

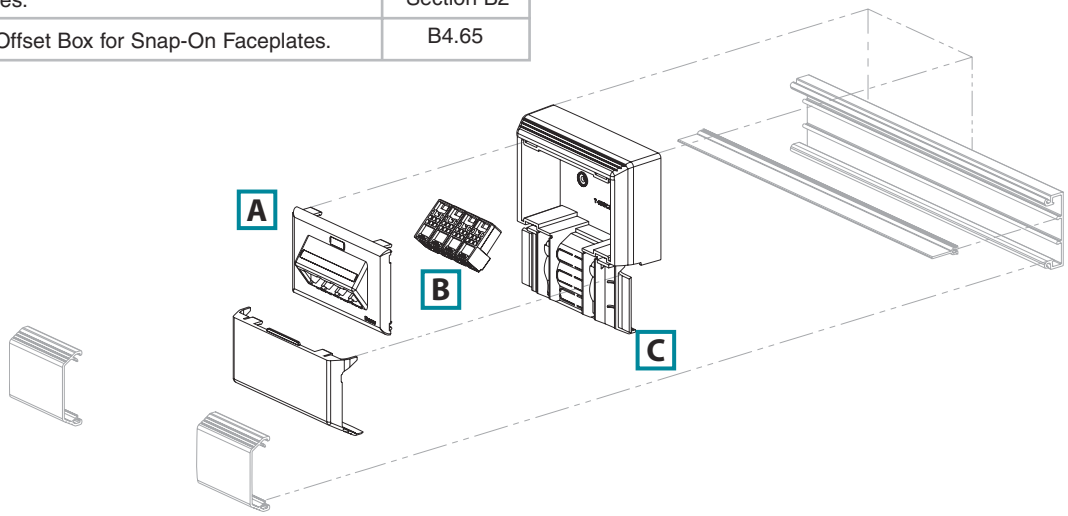


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T-45 Configurations (continued)

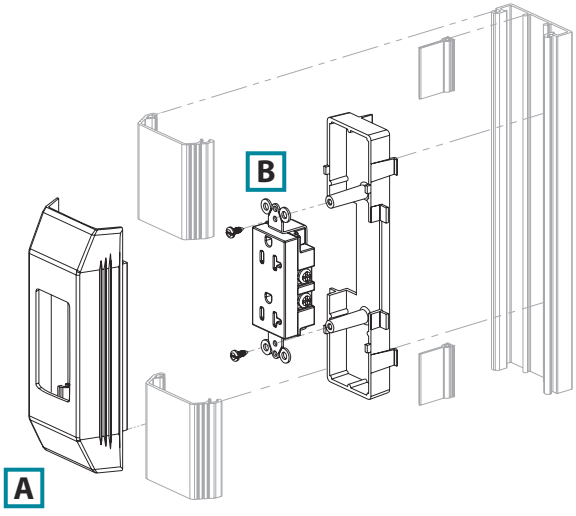
Exploded View 3

	Components Required	See page
A.	UIT70FH4 = *ULTIMATE ID*® Sloped Horizontal Faceplates – 4-Port.	B4.68
B.	*MINI-COM*® Modules.	Section B2
C.	T45WC2 = T-45 Offset Box for Snap-On Faceplates.	B4.65



Exploded View 4

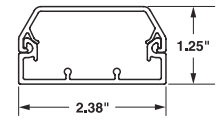
	Components Required	See page
A.	T45HEGB = T-45 Electrical Bracket for Rectangular Outlet.	B4.65
B.	ERU20 = 20 A Rectangular Electrical Outlet (screws included).	B4.72



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PAN-WAY® T-45 Surface Raceway System

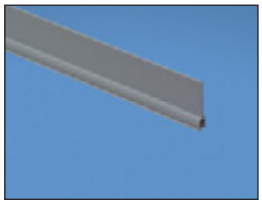
- UL and CSA rated 600 V; meets UL 5A and CSA C22.2 No. 62.1-03 standards; FT4 rated
- Hinged cover allows easy access from either side
- Optional factory applied adhesive backing speeds installation
- Supplied with pre-punched mounting holes
- Tamper resistant
- Terminates using the T-45 hinged data or power brackets, offset box, or surface mount outlet box solutions



T-45
Internal Area = 2.12 Sq. In.


T45B


T45C


T45DW

Part Number	Part Description	Raceway Size	Color‡	Length (ft)	Std. Ctn. Qty.
T-45 Raceway Base with Adhesive					
T45BIW8-A	T-45 raceway base in 8' and 10' lengths with adhesive. Supplied with pre-punched mounting holes.	2.38" x 1.25" (60.3mm x 32.0mm)	Off White	8	160
T45BIW10-A		2.38" x 1.25" (60.3mm x 32.0mm)		10	200
T-45 Raceway Base without Adhesive					
T45BIW8	T-45 raceway base in 8' and 10' lengths with adhesive. Supplied with pre-punched mounting holes.	2.38" x 1.25" (60.3mm x 32.0mm)	Off White	8	160
T45BIW10				10	200
T-45 Raceway Cover					
T45CIW8	T-45 raceway cover in 8' and 10' lengths. Can be hinged open on either side of T-45 base.	—	Off White	8	160
T45CIW10				10	200
T-45 Raceway Divider Wall					
T45DW8	T-45 divider wall. Snaps onto rails in T-45 raceway base to create separate channels. Must use wire retainers to ensure channel separation per UL/CSA. Available in 8' and 10' lengths.	—	Gray	8	160
T45DW10				10	200

‡For other colors replace IW (Off White) with EI (Electric Ivory).
Order base and cover separately.
Order number of feet required in multiples of standard carton quantity.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PAN-WAY® Type T-45 Raceway Fittings

- T-45 fittings are designed to maintain the TIA/EIA-568-B and 569-B required minimum bend radius for high performance copper and fiber optic cabling systems

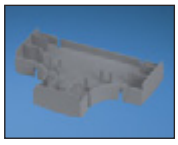

T45CC


T45RA


T45IC


T45OC


T45T


T45TD


T45EC


T45EE

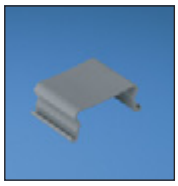

T45RLD


T45TRI


T45HDB


T45HEB


T45HEGB


T45WR-X


T45WC


T45WC2

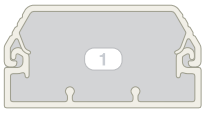
Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
T45CCIW-X	Cover coupler fitting. Used to join two pieces of T-45 cover together.	Off White	10	100
T45RAIW	Right angle fitting. Used to join sections of T-45 raceway at 90° flat junction.	Off White	1	10
T45ICIW	Inside corner fitting. Used to join T-45 raceway at inside corner.	Off White	1	10
T45OCIW	Outside corner fitting. Used to join T-45 raceway at 90° outside corner.	Off White	1	10
T45TIW	Tee fitting. Used to join T-45 raceway at tee intersections.	Off White	1	10
T45TD	Divided insert. Used to separate power and data within the T45T.	Gray	1	10
T45ECIW	End cap fitting. Used to terminate T-45 raceway.	Off White	1	10
T45EEIW	Entrance end fitting. With knockouts for 1/2", 3/4", 1", and 1 1/4" conduit which allows entry from ceiling or wall.	Off White	1	10
T45RLDIW	Reducer fitting. Reduces from T-45 to LD10 profile raceway.	Off White	1	10
T45TRI	Provides bend radius control at transition from T-70 to T-45 when used with T70TR.	Gray	1	10
T45HDBIW*	Snap-on hinged data bracket. Used for mounting *PANDUIT® MINI-COM®* vertically inline within T-45 raceway. Can be hinged opened on either side of T-45 base.	Off White	1	10
T45HEBIW	Electrical bracket and box. Used for mounting standard duplex electrical outlets.	Off White	1	10
T45HEGBIW	Electrical bracket and box. Used for mounting standard rectangular style electrical outlets.	Off White	1	10
T45WR-X	Wire retainers. Used to hold wires in place during installation.	Gray	10	100
T45WCIW	Offset box. Allows for the mounting of any standard electrical or communication outlet offset from the raceway channel. Box accepts any NEMA standard screw-on faceplate or *PAN-WAY®* Electrical Snap-On Faceplates.	Off White	1	10
T45WC2IW	Offset box. Box accepts any *PAN-WAY®* Communication Snap-On Faceplates.	Off White	1	10

‡For other colors replace IW (Off White) with EI (Electric Ivory). T45TD, T45TRI, and T45WR-X available in Gray only.

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Cable Fill Capacities for T-45 Raceway

This information is to be used as a guide in selecting the proper size raceway. The maximum amounts may vary according to the cable installation methods, straightness of cables, etc.



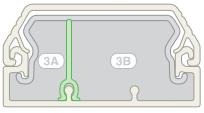
A = 2.13 in.²

Cable fill #1: T-45 with no devices.



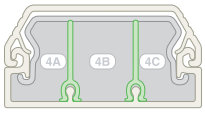
A = 1.72 in.²

Cable fill #2: T-45 with wire retainer.



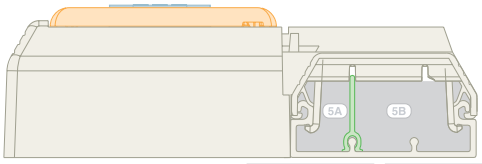
A = .44 in.² B = 1.20 in.²

Cable fill #3: Power and data using a wire retainer and divider wall.



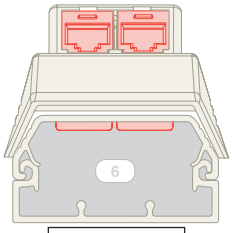
A = .44 in.² B = .68 in.² C = .44 in.²

Cable fill #4: Power and data using a wire retainer and divider walls.



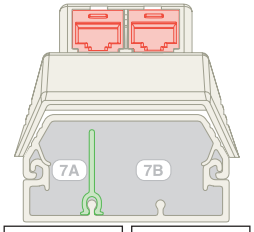
A = .41 in.² B = 1.06 in.²

Cable fill #5: Power and data using the offset box.



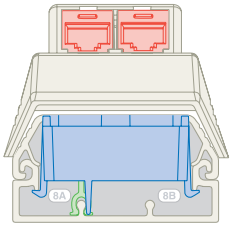
A = 2.00 in.²

Cable fill #6: Data only using hinged data bracket.



A = .52 in.² B = 1.2 in.²

Cable fill #7: Power and data using hinged data bracket with divider insert.



A = .22 in.² B = .5 in.²

Cable fill #8: Power and data using electrical bracket/box and hinged data bracket.

SPEC = 40% cable fill – The recommended design in cable capacity, leaves room for future moves, adds, and changes.

MAX for Data = 60% cable fill – The maximum cable quantity based on cable interweaving and packing factors.

MAX for Power cable fill – The maximum of electrical cables based on UL temperature rise test.

	Raceway Type and Configuration	Fill Area (In.²)	Electrical Cables			Data Grade Cables		Data Grade Cables		Audio/Video		Fiber Optic Cable	
			14 AWG	12 AWG	10 AWG	23 AWG/UTP CM		23/24 AWG/UTP		RG6		2 Strand	
			THHN/T90			Augmented Cat. 6		Category 6 (4-pr.)					
			0.111	0.130	0.164	DIA. = .354		DIA. = .250		DIA. = .275		DIA. = .175	
			FILL			FILL		FILL		FILL		FILL	
			MAX	MAX	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX
			(UL Temp Rise Test)			(40%)	(60%)	(40%)	(60%)	(40%)	(60%)	(40%)	(60%)
1.	T-45: No devices.	2.13	36	27	25	8	13	17	26	11	17	35	53
2.	T-45: No devices with wire retainer.	1.72	36	27	25	7	10	14	21	9	14	28	42
3A.	T-45: Power and data with wire retainer and divider wall (2 channels).	.44	12	11	8	—	—	—	—	—	—	—	—
3B.		1.20	—	—	—	4	7	9	14	6	10	19	29
4A.	T-45: Power and data with wire retainer and two divider walls (three channels).	.44	12	11	8	1	2	3	5	2	3	7	10
4B.		.68	—	—	—	2	4	5	8	4	5	11	16
4C.		.44	—	—	—	1	2	3	5	2	3	7	10
5A.	T-45: Power and data using the offset box.	.41	12	11	8	—	—	—	—	—	—	—	—
5B.		1.06	—	—	—	4	6	8	12	6	8	17	26
6.	T-45: Data only using data bracket.	2.00	—	—	—	8	12	16	24	11	16	33	49
7A.	T-45: Power and data using hinged data bracket with divider insert.	.52	12	11	8	—	—	—	—	—	—	—	—
7B.		1.2	—	—	—	4	7	9	14	6	10	19	29
8A.	T-45: Power and data using electrical bracket and box.	.22	9	7	4	—	—	—	—	—	—	—	—
8B.		.5	—	—	—	2	3	4	6	3	4	8	12

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PAN-WAY® SNAP-ON FACEPLATES AND SURFACE MOUNT OUTLET BOXES

PAN-WAY® Snap-On Faceplates are designed for use with *PANDUIT* surface raceway systems and install faster than conventional screw-on faceplates, reducing labor costs and providing a more aesthetic appearance. *PAN-WAY®* Snap-On Communication Faceplates are available in vertical and horizontal orientation and accept *PANDUIT® MINI-COM®* Copper and Fiber Optic Modules. Electrical outlets are available in colors to complement *PANDUIT* raceway and are available in 20 A, 106 duplex, rectangular, TVSS and GFCI.





- **Snap-on faceplates install without the use of screws providing faster installation and superior aesthetics**
- ***FAST-SNAP™* Boxes assemble without the use of screws and accept *PAN-WAY®* Snap-On Faceplates**
- **Snap-on communication faceplates are available in horizontal or vertical sloped outlet configurations**
- **Snap-on electrical faceplates are available in 106 duplex or rectangular styles**



Surface mount outlet boxes are available for both power and communication applications. They are compatible with *PAN-WAY®* LD, LDPH, LD2P10 and T-45 Raceway Systems. *PAN-WAY®* Snap-On Faceplates mount directly to Cove, TG-70, T-70, Twin-70 raceways, *PAN-WAY® FAST-SNAP™* Boxes and *PAN-POLE™* Aluminum Outlet Poles.

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PANDUIT® MINI-COM® ULTIMATE ID® Sloped Snap-On Faceplates

- For use with *PANDUIT* raceway: LD, T-45, T-70, Twin-70, TG-70, *PAN-POLE™* Outlet Pole and *FAST-SNAP™* Outlet Boxes
- Snap into raceway channel or outlet box and requires no additional mounting hardware or adapters – greatly reducing installation time
- Meet stringent UL 5A standard for non-metallic raceways
- Accept *MINI-COM®* Modules for STP and UTP (including Category 5e and Category 6), fiber optic and coax, which snap in and out for easy moves, adds, and changes
- Can be clearly identified with the *PANTHER™* LS8E or the *COUGAR™* LS9 Hand-Held Thermal Transfer Printers
- Computer printable label sheets for desktop printers and write-on labels available
- Supplied with clear station and port label covers, labels sold separately
- Replacement label covers available
- Optional icons available
- *ULTIMATE ID®* components are part of a complete system for identification designed to efficiently support TIA/EIA-606-A standard labeling requirements; reference page F1.8


UIT70FH2


UIT70FH4


UIT70FV2


UIT70FV4

Part Number	Part Description	Labels Required*	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
UIT70FH2IW	Single gang, horizontal sloped communication snap-on faceplate accepts up to two *MINI-COM®* Modules.	One 1-Port One 2-Port	Off White	1	10
UIT70FH4IW	Single gang, horizontal sloped communication snap-on faceplate accepts up to four *MINI-COM®* Modules.	One 1-Port One 4-Port	Off White	1	10
UIT70FV2IW	Single gang, vertical sloped communication snap-on faceplate accepts up to two *MINI-COM®* Modules.	One 1-Port One 2-Port	Off White	1	10
UIT70FV4IW	Single gang, vertical sloped communication snap-on faceplate accepts up to four *MINI-COM®* Modules.	One 1-Port One 4-Port	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White) or IG (International Gray).
*Computer printable labels found on pages F1.5 – F1.12.

Component Labels for *MINI-COM® ULTIMATE ID®* Sloped Snap-On Faceplates for Use with *PANDUIT® MINI-COM®* Modules



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER™* LS8E Hand-Held Printer Label	*COUGAR™* LS9 Hand-Held Printer Label
UIT70FH2IW	UILJ2	—	UILS8BW	UILS8BW
UIT70FH4IW	UILJ4	—		
UIT70FV2IW	UILJ2	—		
UIT70FV4IW	UILJ4	—		

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PAN-WAY® Classic Series Snap-On Faceplates for Use with PANDUIT® MINI-COM® Modules

- Can be used with PAN-WAY® Cove, TG-70, T-70, Twin-70, T-45 Raceway Systems, FAST-SNAP™ Outlet Boxes and PAN-POLE™ Aluminum Outlet Pole


T70FH2


T70FH4


T70FV2


T70FV4


T70P


T70PG


T70PS


T70PGS

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
T70FH2IW	Snap-on horizontal sloped communication faceplate. Accepts two PANDUIT® MINI-COM® Modules (not included). No additional mounting hardware required..	Off White	1	10
T70FH4IW	Snap-on horizontal sloped communication faceplate. Accepts four PANDUIT® MINI-COM® Modules (not included). No additional mounting hardware required.	Off White	1	10
T70FV2IW	Snap-on vertical sloped communication faceplate. Accepts two PANDUIT® MINI-COM® Modules (not included). No additional mounting hardware required.	Off White	1	10
T70FV4IW	Snap-on vertical sloped communication faceplate. Accepts four PANDUIT® MINI-COM® Modules (not included). No additional mounting hardware required.	Off White	1	10
T70PIW	Snap-on single gang 106 duplex electrical/communication faceplate. Used to cover one NEMA standard 106 duplex electrical outlet. In communication applications, covers one standard 106 duplex communication module frame.	Off White	1	10
T70PGIW	Snap-on single gang rectangular electrical/communication faceplate. Used to cover one NEMA standard rectangular electrical outlet. In communication applications, covers one standard rectangular communication module frame.	Off White	1	10
T70PSIW	Snap-on single gang 106 duplex communication faceplate. Used to cover one NEMA standard 106 duplex communication module frame. Module frame screw mounts directly to underside of snap-on faceplate. No mounting device needed. Supplied with one mounting screw. Note: Not for use with electrical devices.	Off White	1	10
T70PGSIW	Snap-on single gang rectangular communication faceplate. Used to cover one NEMA standard rectangular communication module frame. Module frame screw mounts directly to underside of snap-on faceplate. No mounting device needed. Supplied with two mounting screws. Note: Not for use with electrical devices.	Off White	1	10

‡For other colors replace IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).
For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Component Labels for PAN-WAY® Classic Series Snap-On Faceplates for Use with PANDUIT® MINI-COM® Modules



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
T70FH2IW	C125X030FJJ	C125X030YPT	C125X030FJC	T031X000FJC-BK
T70FV2IW				
T70FV4IW				
T70FH4IW	C252X030FJJ	C252X030YPT	C252X030FJC	T031X000FJC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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PAN-WAY® Classic Series Snap-On Faceplates for Use with PANDUIT® MINI-COM® Inserts

- Single gang vertical or horizontal sloped communication faceplates accept one or two PANDUIT® MINI-COM® Inserts
- Can be used with PAN-WAY® Cove, TG-70, T-70, Twin-70, T-45 Raceway Systems, FAST-SNAP™ Outlet Boxes and PAN-POLE™ Aluminum Outlet Pole



T70BH1 T70BH2



T70B1 T70B2

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
T70BH1IW	Snap-on horizontal communication faceplate. Accepts one 1/2-size PANDUIT® MINI-COM® Insert and two modules. No additional mounting hardware required.	Off White	1	10
T70BH2IW	Snap-on horizontal communication faceplate. Accepts two 1/2-size PANDUIT® MINI-COM® Inserts and four modules. No additional mounting hardware required.	Off White	1	10
T70B1IW	Snap-on vertical communication faceplate. Holds one 1/2-size PANDUIT® MINI-COM® Insert and two modules. No additional mounting hardware required.	Off White	1	10
T70B2IW	Snap-on vertical communication faceplate. Holds two 1/2-size PANDUIT® MINI-COM® Inserts and four modules. No additional mounting hardware required.	Off White	1	10

‡For other colors replace IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).

Component Labels for PAN-WAY® Classic Series Snap-On Faceplates for Use with PANDUIT® MINI-COM® Inserts

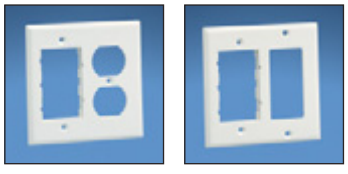


Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	**PANTHER™ LS8E Hand-Held Printer Label**	**COUGAR™ LS9 Hand-Held Printer Label**
All T70B parts	**C125X030FJJ**	**C125X030YPT**	**C125X030FJC**	**T031X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

PAN-WAY® Classic Series Faceplates for Power and Communication Applications

- For use with JBP2S or JBP2D outlet boxes



FP2DC FP2RC

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
FP2DCIW	Covers one NEMA standard 106 duplex electrical receptacle and accepts PANDUIT® MINI-COM® 1/2-size, 1/3-size, and 2/3-size inserts. For product application, please reference LD profile raceway section.	Off White	1	10
FP2RCIW	Covers one NEMA standard rectangular electrical receptacle and accepts PANDUIT® MINI-COM® 1/2-size, 1/3-size, and 2/3-size inserts. For product application, please reference LD profile raceway section.	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).
All faceplates supplied with mounting screws.

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PAN-WAY® Classic Series Power and Communication Faceplates


CP106


CP106**-2G


CPG


CPG**-2G

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CP106IW	Screw-on single gang 106 duplex faceplate. Covers one NEMA standard 106 duplex electrical outlet or one standard 106 communication module frame.	Off White	1	10
CP106IW-2G	Screw-on double gang 106 duplex faceplate. Covers two NEMA standard 106 duplex electrical outlets or two standard 106 communication module frames.	Off White	1	10
CPGIW	Screw-on single gang rectangular faceplate. Covers one NEMA standard rectangular electrical outlet or one standard rectangular communication module frame.	Off White	1	10
CPGIW-2G	Screw-on double gang rectangular faceplate. Covers two NEMA standard rectangular electrical outlets or two standard rectangular communication module frames.	Off White	1	10

‡For other colors, replace IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).
All faceplates supplied with mounting screws.

Component Labels for Classic Series Power and Communication Faceplates



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	**PANTHER™ LS8E Hand-Held Printer Label**	**COUGAR™ LS9 Hand-Held Printer Label**
CPGIW T70PGS	**C125X030FJJ**	**C125X030YPT**	**C125X030FJC**	**T031X000FJC-BK**
CPGIW-2G FP2RC	**2-C125X030FJJ**	**2-C125X030YPT**	**2-C125X030FJC**	**T031X000FJC-BK**
T70PG	**C261X030FJJ**	**T031X000FJT**	**C261X030FJC**	**T031X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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Executive Series Power and Communication Faceplates

- Designed for in-wall box applications


ECPG


ECPG**-2G

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
ECPGIW	Covers one NEMA standard rectangular electrical receptacle. In communication applications accepts one *MINI-COM*® GFCI Module Frame.	Off White	1	10
ECPGIW-2G	Covers two NEMA standard rectangular or TVSS electrical receptacle. In communication applications accepts two *MINI-COM*® GFCI Module Frame.	Off White	1	10

‡For other colors replace suffix IW (Off White) with EI (Electric Ivory), WH (White), or IG (International Gray).
Not for use with wall board adapters.
All faceplates supplied with mounting screws.

Component Labels for Executive Series Power and Communication Faceplates



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER***™ **LS8E Hand-Held Printer Label**	***COUGAR***™ **LS9 Hand-Held Printer Label**
All ECPG parts	**C125X030FJJ**	**C125X030YPT**	**C125X030FJC**	**T031X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

PAN-WAY® Electrical Outlets

- Electrical outlets are standard electrical devices that fit into *PAN-WAY*® Outlet Boxes or any NEMA standard outlet boxes


EDU20


ERU20


ETU20


EGU20

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
EDU20IW-X	20 A specification grade 106 duplex outlet.	Off White	10	—
ERU20IW-X	20 A specification grade rectangular outlet.	Off White	10	—
ETU20IW-X	20 A specification grade TVSS rectangular outlet (transient voltage surge suppressor).	Off White	10	—
EGU20IW-X	20 A specification grade GFCI rectangular outlet (ground fault circuit interrupter).	Off White	10	—

‡For other colors, replace IW (Off White) with EI (Electric Ivory).
All outlets supplied with mounting screws.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PAN-WAY® Classic Series Blank Faceplates


T70PN


CPN


CPN**-2G

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
T70PNIW	Snap-on single gang blank cover faceplate.	Off White	1	10
CPNIW	Screw-on single gang blank cover faceplate. Can be used with PAN-WAY® Cove, TG-70, T-70, Twin-70, T-45 Raceway Systems, FAST-SNAP™ Outlet Boxes and PAN-POLE™ Aluminum Outlet Pole. Supplied with two mounting screws.	Off White	1	10
CPNIW-2G	Screw-on double gang blank cover faceplate. For use with PAN-WAY® Surface Mount Outlet Boxes. Supplied with four mounting screws.	Off White	1	10

‡For other colors, replace IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).
Can be easily identified with labels, reference chart on page F1.5 – F1.12.

PAN-WAY® Stainless Steel Faceplates


WPS-20


WPS-202

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
WPS-20	Stainless steel single gang 106 duplex screw-on faceplate. Covers one NEMA standard 106 duplex electrical outlet or one standard 106 communication module frame.	1	10
WPS-202	Stainless steel double gang 106 duplex screw-on faceplate. Covers two NEMA standard 106 duplex electrical outlets or two standard 106 communication module frames.	1	10

All faceplates supplied with mounting screws.

Component Labels for PAN-WAY® Stainless Steel Faceplates



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	**PANTHER™ LS8E Hand-Held Printer Label**	**COUGAR™ LS9 Hand-Held Printer Label**
All WPS parts	**C061X030FJJ**	**C061X030YPT**	**C061X030FJC**	**T031X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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PAN-WAY® Low Voltage Surface Mount Outlet Boxes

- JBX3510, JB1FS, and JB1FSD assembles without the use of screws for faster installation
- JBX3510, JB1, JB1D, JB1FS and JB1FSD are supplied with adhesive backing to speed installation
- JB1 and JB1D are a one-piece design requiring no assembly


JBX3510


JB1


JB1D


JBP2


JBP2D


RJBX3510


JBA-X


JB1FS


JB1FSD

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
JBX3510IW-A	Single gang two-piece snap together outlet box with adhesive backing. Box accepts PAN-WAY® Screw-On Faceplates or any NEMA standard single gang faceplate. For use with PAN-WAY® T45 or LD profile raceway. 5.00"L x 3.26"W x 1.62"H. (127.1mm x 82.7mm x 41.1mm). Breakouts for 1/2", 3/4", or 1" diameter conduit.	Off White	1	10
JB1IW-A	Single gang one-piece outlet box with adhesive backing. Box accepts PAN-WAY® Screw-On Faceplates or any NEMA standard single gang faceplate. For use with PAN-WAY® LD Profile Raceway. 5.09"L x 3.34"W x 1.75"H. (129.4mm x 85.0mm x 44.4mm). Breakouts for 1/2", 3/4", or 1" diameter conduit.	Off White	1	10
JB1DIW-A	Single gang one-piece deep outlet box with adhesive backing. Box accepts PAN-WAY® Screw-On Faceplates or any NEMA standard single gang faceplate. For use with PAN-WAY® LD Profile Raceway. 5.23"L x 3.48"W x 2.75"H. (133.0mm x 88.5mm x 69.8mm). Breakouts for 1/2", 3/4", or 1" diameter conduit.	Off White	1	10
JBP2IW	Double gang two-piece screw together outlet box. Box accepts PAN-WAY® Screw-On Faceplates or any NEMA standard double gang faceplates. For use with PAN-WAY® LD Profile Raceway. 5.05"L x 5.05"W x 1.62"L. (128.2mm x 128.2mm x 41.1mm). Breakouts for 1/2", or 3/4" diameter conduit.	Off White	1	10
JBP2DIW	Double gang two-piece screw together deep outlet box. Box accepts PAN-WAY® Screw-On Faceplates or any NEMA standard double gang faceplate. For use with PAN-WAY® T-45 or LD Profile Raceway. 5.19"L x 5.19"W x 2.75"H. (131.9mm x 131.9mm x 69.8mm). Breakouts for 1/2", 3/4", or 1" diameter conduit.	Off White	1	10
RJBX3510IW	Single gang two-piece screw together round outlet box. Box accepts UL/CSA devices not to exceed 10 lbs. (5 lbs. per CSA). For use with PAN-WAY® LD Profile Raceway. Dia. = 5.48"D x 1.14"H. (139.2mm x 29.0mm). Breakouts for 3/4" or 1" diameter conduit.	Off White	1	5
JBA-X	In-wall box adapter. Adapts single gang surface mount outlet boxes to in-wall conduit boxes.	—	10	100
JB1FSIW-A	FAST-SNAP™ Single Gang Two-Piece Snap Together Outlet Box with adhesive backing. Box accepts PAN-WAY® Snap-On Faceplates. For use with PAN-WAY® T-45 or LD profile raceway. 5.00"L x 3.26"W x 1.62"H. (127.1mm x 82.7mm x 41.1mm). Breakouts for 1/2", 3/4", or 1" diameter conduit.	Off White	1	10
JB1FSDIW-A	FAST-SNAP™ Single Gang Two-Piece Snap Together Deep Outlet Box with adhesive backing. Box accepts PAN-WAY® Snap-On Faceplates. For use with PAN-WAY® T-45 or LD profile raceway. 5.16"L x 3.41"W x 2.75"H. (131.1mm x 86.7mm x 69.8mm). Breakouts for 1/2", 3/4", or 1" diameter conduit.	Off White	1	10

‡For other colors replace IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PAN-WAY® Surface Mount Outlet Box with 20 A Electrical Outlet

- Supplied with a 20 A U.S. style rectangular electrical outlet and a 20 A 106 duplex lectrical outlet.


JBP1MR20


JBP1MD20

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
JBP1MR20IW	Single gang two-piece power rated low profile snap together outlet box. Includes 20 A U.S. style rectangular electrical outlet. For use with PAN-WAY® LDP3, 5, 10 or LDS3 or 5 Profile Raceway only. 4.84"L x 2.90"W x 1.20"H. (122.9mm x 73.6mm x 30.4mm).	Off White	1	10
JBP1MD20IW	Single gang two-piece power rated low profile snap together outlet box. Includes 20 A U.S. style 106 duplex electrical outlet. For use with PAN-WAY® LDP3, 5, 10 or LDS3 or 5 Profile Raceway only. 4.84"L x 2.90"W x 1.22"H. (122.9mm x 73.6mm x 30.9mm).	Off White	1	10

‡For other color replace IW (Off White) with EI (Electric Ivory).

PAN-WAY® Power Rated Surface Mount Outlet Boxes

- UL and CSA rated 600 V; meets UL 5A and CSA C22.2 No. 62.1-03 standards
- JBP2FS assembles without the use of screws for faster installation


JBP1


JBP2


JBP1D


JBP2D


JBP1E


JBP1I

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
JBP1IW	Single gang two-piece screw together outlet box. Box accepts PAN-WAY® Screw-On Faceplates or any NEMA standard single gang faceplate. For use with PAN-WAY® LD Profile Raceways. 5.19"L x 3.45"W x 1.75"H. (131.9mm x 87.7mm x 44.4mm). Breakouts for 1/2", 3/4", or 1" diameter conduit.	Off White	1	10
JBP2IW	Double gang two-piece screw together outlet box. Box accepts PAN-WAY® Screw-On Faceplates or any NEMA standard double gang faceplates. For use with PAN-WAY® LD Profile Raceway. 5.05"L x 5.05M,27[QM]»W x 1.62"L. (128.2mm x 128.2mm x 41.1mm). Breakouts for 1/2", or 3/4" diameter conduit.	Off White	1	10
JBP1DIW	Single gang two-piece screw together deep outlet box. Box accepts PAN-WAY® Screw-On Faceplates or any NEMA standard single gang faceplate. For use with PAN-WAY® T-45, LD2P10 (when used with JBD1), or LD Profile Raceways. 5.19"L x 3.45"W x 2.75"H (131.9mm x 87.7mm x 69.8mm). Breakouts for 1/2", 3/4", or 1" diameter conduit.	Off White	1	10
JBP2DIW	Double gang two-piece screw together deep outlet box. Box accepts PAN-WAY® Screw-On Faceplates or any NEMA standard double gang faceplate. For use with PAN-WAY® T-45 or LD Profile Raceway. 5.19"L x 5.19"W x 2.75"H. (131.9mm x 131.9mm x 69.8mm). Breakouts for 1/2", 3/4", or 1" diameter conduit.	Off White	1	10
JBP1EIW	Single gang two-piece screw together extension outlet box. Box accepts PAN-WAY® Screw-On Faceplates or any NEMA standard single gang faceplate. For use with PAN-WAY® LD Profile Raceways. 4.99"L x 3.30"W x 1.00"H. (126.7mm x 83.8mm x 25.4mm). Breakouts for 1/2", 3/4", or 1" diameter conduit.	Off White	1	10
JBP1IIW	Single gang two-piece screw together intermediate outlet box. Box accepts PAN-WAY® Screw-On Faceplates or any NEMA standard single gang faceplate. For use with PAN-WAY® LD Profile Raceway. 5.12"L x 3.38"W x 2.27"H. (130.2mm x 86.0mm x 57.7mm). Breakouts for 1/2" or 3/4" diameter conduit.	Off White	1	10

‡For other colors replace IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).

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PAN-WAY® Power Rated Surface Mount Outlet Boxes (continued)


PSJBX


JBD1


JBP2S


JBD2


JBP2FS


RJBX3510

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
PSJBXIW	Single gang two-piece snap together power source box. For use with PAN-WAY® LDP3, 5, 10, or LDS3, or 5 Profile Raceway. 5.02"L x 3.32"W x 1.31"H. (127.6mm x 83.0mm x 33.3mm). Breakouts for 1/2", 3/4", or 1" diameter conduit.	Off White	1	10
JBD1	Single gang pass-through divider. Allows power and communication outlets to be routed in series. For use with JBP1 or JBP1D when installing LD2P10 raceway.	Off White	1	10
JBP2SIW	Double gang two-piece screw together divided outlet box. Box accepts PAN-WAY® Screw-On Faceplates or any NEMA standard double gang faceplate. For use with PAN-WAY® T-45 or LD Profile Raceway. 5.05"L x 5.05"W x 1.62"H. (128.2mm x 128.2mm x 41.1mm). Breakouts for 1/2", or 3/4" diameter conduit.	Off White	1	10
JBD2	Double gang pass-through divider. Allows power and communication outlets to be routed in series. For use with JBP2D when installing LD2P10 raceway.	Off White	1	10
JBP2FSIW	FAST-SNAP™ Double Gang Power Rated Two-Piece Snap Together Outlet Box. Box accepts PAN-WAY® Snap-On Faceplates. For use with PAN-WAY® T-45 or LD profile raceway. 5.00"L x 6.14"W x 1.62"H (127.1mm x 155.9mm x 41.1mm). Breakouts for 1/2", 3/4", or 1" diameter conduit.	Off White	1	10
RJBX3510IW	Single gang two-piece screw together round outlet box. Box accepts UL/CSA devices not to exceed 10 lbs. (5 lbs. per CSA). For use with PAN-WAY® LD Profile Raceway. Dia. = 5.48"D x 1.14"H. (139.2mm x 29.0mm). Breakouts for 3/4" or 1" diameter conduit.	Off White	1	5

‡For other colors replace IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Selection Chart for using PAN-WAY® Surface Raceway with PAN-WAY® Surface Mount Outlet Boxes

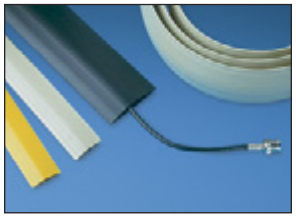
How to use this chart:

1. **Locate the desired PAN-WAY® Raceway in the left column.**
2. **Locate the desired PAN-WAY® Outlet Box in the top row.**
3. **Match up the raceway with the outlet box to see if they are compatible. (Y = yes, N = no).**
4. **Select correct surface mount outlet box.**

	PAN-WAY® Surface Mount Outlet Boxes								
	Low Voltage or Fiber Optic ONLY	Power, Low Voltage or Fiber Optic							
	JB1, JB1D JB1FS, JB1FSD JBX3510	RJBX3510	JBP1	JBP1D	JBP1E	JBP1I JBP2	JBP2S JBP2D JBP2FS	JBP1MR20 JBP1MD20	PSJBX
Type LD (Low Voltage or Fiber Optic ONLY)									
LD3	Y	Y	Y	Y	Y	Y	Y	N	Y
LD5	Y	Y	Y	Y	Y	Y	Y	N	Y
LD10	Y	Y	Y	Y	Y	Y	Y	N	Y
Type LDP (Power, Low Voltage or Fiber Optic)									
LDP3	Y	Y	Y	Y	Y	Y	Y	Y	Y
LDP5	Y	Y	Y	Y	Y	Y	Y	Y	Y
LDP10	Y	Y	Y	Y	Y	Y	Y	Y	Y
Type LDS (Power, Low Voltage or Fiber Optic)									
LDS3	Y	Y	Y	Y	Y	Y	Y	Y	Y
LDS5	Y	Y	Y	Y	Y	Y	Y	Y	Y
Type LD2P10 (Power, Low Voltage or Fiber Optic)									
LD2P10	N	N	N	Y w/JBD1	N	N	Y	N	N
Type T-45 (Power, Low Voltage or Fiber Optic)									
T-45	Y (JB1FS, JB1FSD, and JBX3510)	N	N	Y	N	N	Y	N	N

Floor Guard

- Accessory to route cables over carpet, concrete, or tile to prevent tripping
- Flexible vinyl material can be easily cut to specific lengths
- Cables route through underside of product



FG1**
FG3**

Part Number	Part Description	Color‡	Std. Pkg. Qty.
FG1EI6-A	Flexible vinyl material used to route cabling over carpet, tile, and concrete. Product available in 6' and 50' rolls.	Electric Ivory	1
FG1EI50-A	Flexible vinyl material used to route cabling over carpet, tile, and concrete. Product available in 6' and 50' rolls.	Electric Ivory	30
FG3EI6S-A	Flexible vinyl material used to route cabling over carpet, tile, and concrete. Product available in 6' and 50' rolls.	Electric Ivory	30
FG3EI50-A	Flexible vinyl material used to route cabling over carpet, tile, and concrete. Product available in 6' and 50' rolls.	Electric Ivory	1

Mounting tape is pre-applied only to FG3 in 6' lengths.
‡For other colors replace EI (Electric Ivory) with BR (Brown), YL (Safety Yellow), or BL (Black).

PAN-WAY® Surface Raceway Cutting Tool



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
SRT	Used to cut all LD profile raceway. Leaves a clean burr-free finish on raceway. Can also be used to cut plastic conduit.	1	10

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Foam Tape

- Acrylic foam tape – Recommended for high temperature and outdoor applications (180°F) and exposure to UV light
- Rubber foam tape – Excellent quick tack designed for long term shear loads in indoor applications up to 120°F



P32W2A2
P32W2R1

Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
1/32" Thick White Acrylic Adhesive				
P32W2A2-50-7	Foam tape, 1/32" (thick) x .50" (wide) x 7 yards, acrylic adhesive.	White	1	100
P32W2A2-75-7	Foam tape, 1/32" (thick) x .75" (wide) x 7 yards, acrylic adhesive.	White	1	60
P32W2A2-100-7	Foam tape, 1/32" (thick) x 1" (wide) x 7 yards, acrylic adhesive.	White	1	50
P32W2A2-50-72	Foam tape, 1/32" (thick) x .50" (wide) x 72 yards, acrylic adhesive.	White	1	9
P32W2A2-75-72	Foam tape, 1/32" (thick) x .75" (wide) x 72 yards, acrylic adhesive.	White	1	7
P32W2A2-100-72	Foam tape, 1/32" (thick) x 1" (wide) x 72 yards, acrylic adhesive.	White	1	5
1/32" Thick White Rubber Adhesive				
P32W2R1-50-7	Foam tape, 1/32" (thick) x .50" (wide) x 7 yards, rubber adhesive.	White	1	100
P32W2R1-75-7	Foam tape, 1/32" (thick) x .75" (wide) x 7 yards, rubber adhesive.	White	1	60
P32W2R1-100-7	Foam tape, 1/32" (thick) x 1" (wide) x 7 yards, rubber adhesive.	White	1	50
P32W2R1-50-72	Foam tape, 1/32" (thick) x .50" (wide) x 72 yards, rubber adhesive.	White	1	9
P32W2R1-75-72	Foam tape, 1/32" (thick) x .75" (wide) x 72 yards, rubber adhesive.	White	1	7
P32W2R1-100-72	Foam tape, 1/32" (thick) x 1" (wide) x 72 yards, rubber adhesive.	White	1	5
P32W2R1-150-72	Foam tape, 1/32" (thick) x 1.5" (wide) x 72 yards, rubber adhesive.	White	1	4

LD/LD2P10 Raceway Installation Tool

- Serves as a guide for drill bit in screw mount applications
- Holds LD/LD2P10 raceway open during installation



Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
LDW10-V	Installation tool for use with type LD10 and LD2P10 raceway.	Black	5	50
LDW5-V	Installation tool for use with type LD5 raceway.	Black	5	50
LDW3-V	Installation tool for use with type LD3 raceway.	Black	5	50

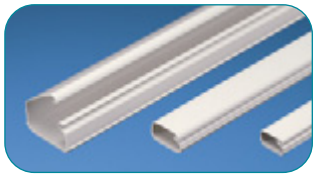
Order number of pieces required, in multiples of Standard Package Quantity.
Prime items appear in **BOLD**.
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PAN-WAY® LD PROFILE NON-METALLIC SURFACE RACEWAY

PAN-WAY® LD Profile Raceway is available in single and multi-channel styles to provide a solution for routing copper, fiber optic, and power cabling along fixed perimeter walls.







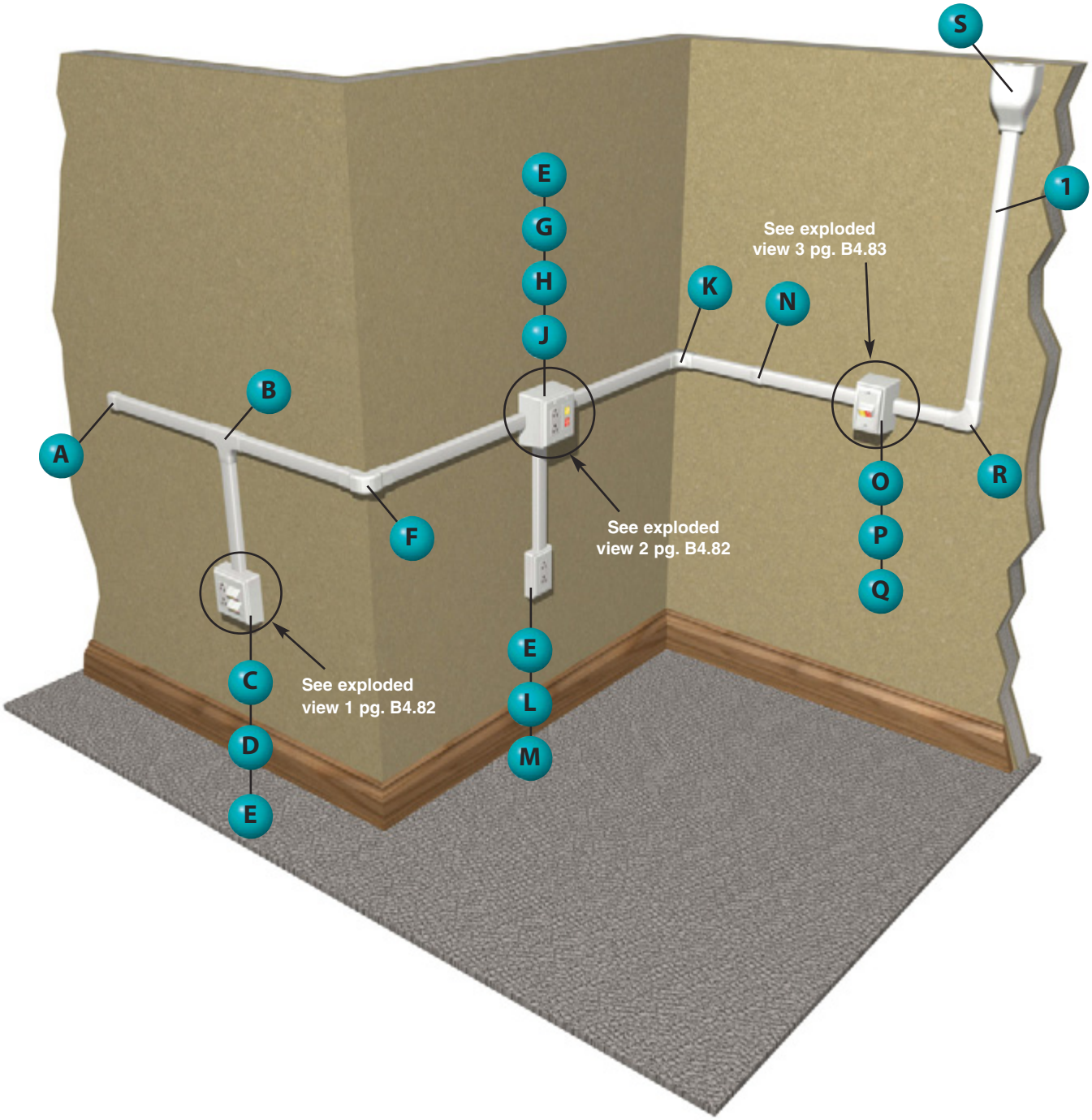
- LD2P10 features one-piece multi-channel design for both power and data applications
- LDPH is a tamper resistant two-piece latching surface raceway supplied with pre-applied adhesive backed tape.
- LD features one-piece single channel design for data routing
- LDS features one-piece single channel tamper resistant design with maximum security for power OR data applications

PAN-WAY® LD Profile Raceways include a full complement of fittings for standard, bend radius control, power rated and multi-channel use, and transition easily to other *PANDUIT* raceway such as Cove, TG-70, T-70, Twin-70 and T-45.

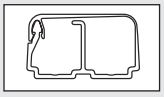
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F1. Labeling & Identification
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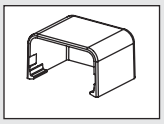
LD2P10 Profile Raceway Roadmap



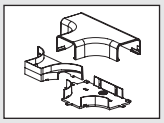
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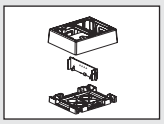
1 LD2P10 Raceway (page B4.91)



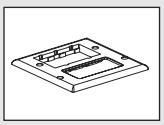
A ECFX10** – Power Rated End Cap Fitting (page B4.91)



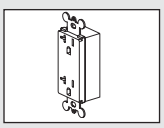
B TFXD10** – 1" Bend Radius Tee Fitting (page B4.91)



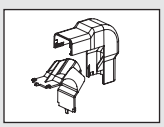
C JBP2S** – Power Rated Double Gang Three-Piece Divided Box (page B4.76)



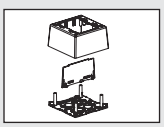
D FP2RC** – Double Gang Rectangular Electrical and Two Communication Insert Faceplate (page B4.70)



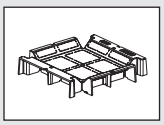
E ERU20** – 20 A Rectangular Electrical Outlet (page B4.72)



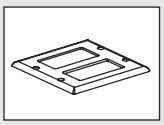
F OCFX10** – 1" Bend Radius Outside Corner Fitting (page B4.95)



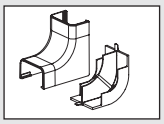
G JBP2D** – Power Rated Double Gang Two-Piece Deep Box (page B4.76)



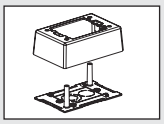
H JBD2 —Double Gang Pass Through and Divider for LD2P10 Raceway (page B4.76)



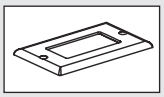
J CPG**-2G – Double Gang Rectangular Screw-On Faceplate (page B4.71)



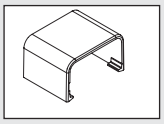
K ICFX10** – Power Rated Inside Corner Fitting (page B4.91)



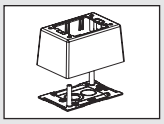
L JBP1** – Power Rated Single Gang Two-Piece Box (page B4.75)



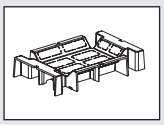
M CPG** – Single Gang Rectangular Screw-On Faceplate (page B4.71)



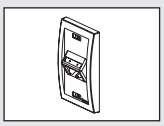
N CFX10** – Power Rated Coupler Fitting (page B4.91)



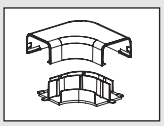
O JBP1D** – Single Gang Two-Piece Deep Box (page B4.75)



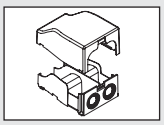
P JBD1 – Single Gang Pass Through Divider for LD2P10 Raceway (page B4.76)



Q UICFPSE2** – *ULTIMATE ID*® 2-Position Executive Sloped Faceplate (page B3.6)



R RAFX10** – Power Rated Right Angle Fitting (page B4.91)



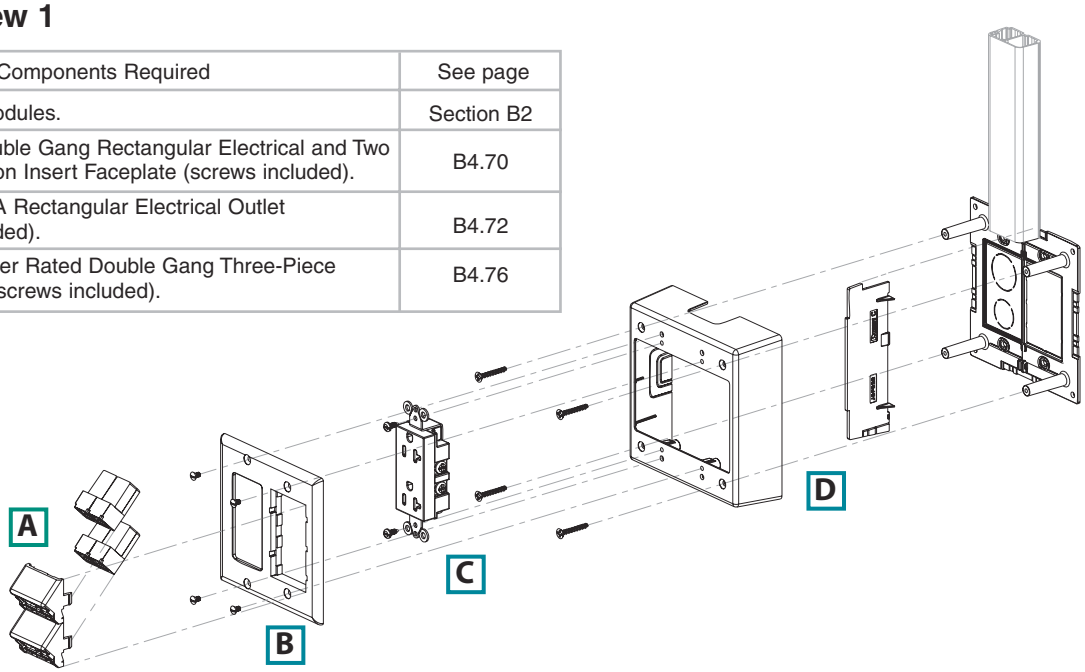
S EEFX** – Power Rated/1" Bend Radius Entrance End Fitting (page B4.91)

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LD2P10 Configurations

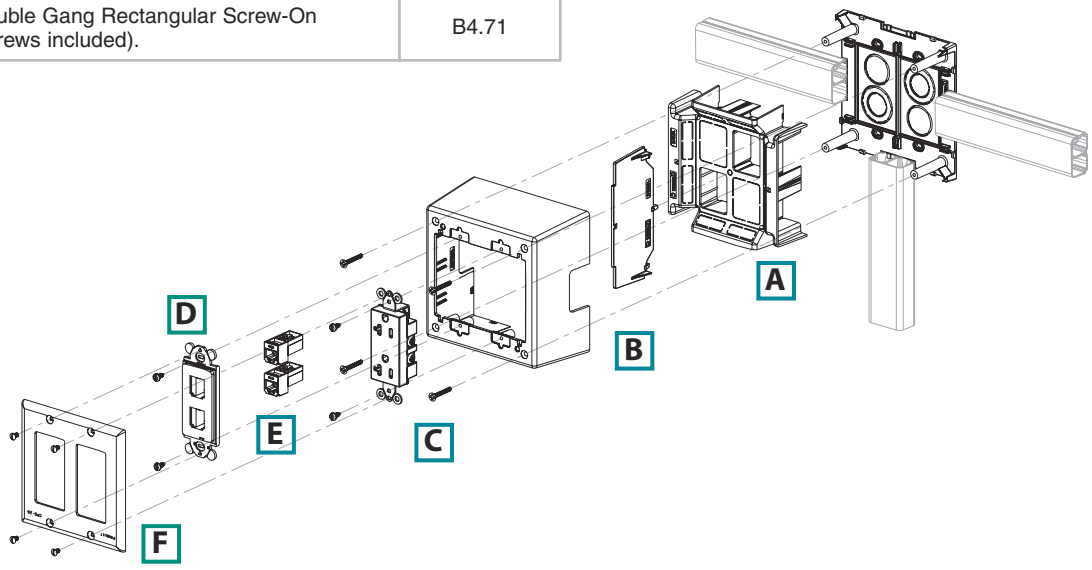
Exploded View 1

	Components Required	See page
A.	*MINI-COM*® Modules.	Section B2
B.	FP2RC = Double Gang Rectangular Electrical and Two Communication Insert Faceplate (screws included).	B4.70
C.	ERU20 = 20 A Rectangular Electrical Outlet (screws included).	B4.72
D.	JBP2S = Power Rated Double Gang Three-Piece Divided Box (screws included).	B4.76



Exploded View 2

	Components Required	See page
A.	JBD2 = Double Gang Pass Through Divider for LD2P10 Raceway.	B4.76
B.	JBP2D = Power Rated Double Gang Two-Piece Deep Box.	B4.74
C.	ERU20 = 20 A Rectangular Electrical Outlet (screws included).	B4.72
D.	CFG2 = *MINI-COM*® Module Frame – 2-Port.	B3.17
E.	*MINI-COM*® Modules.	Section B2
F.	CPG2G = Double Gang Rectangular Screw-On Faceplate (screws included).	B4.71

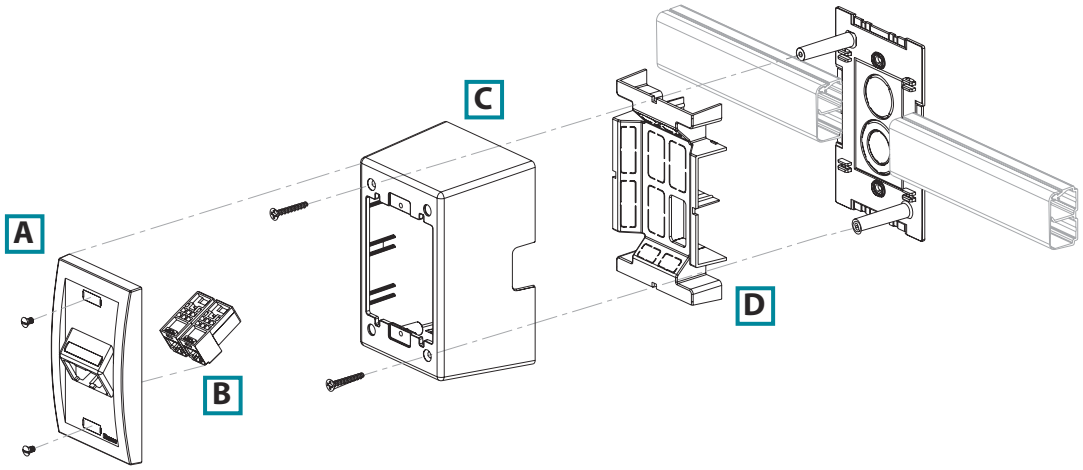


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LD2P10 Configurations (continued)

Exploded View 3

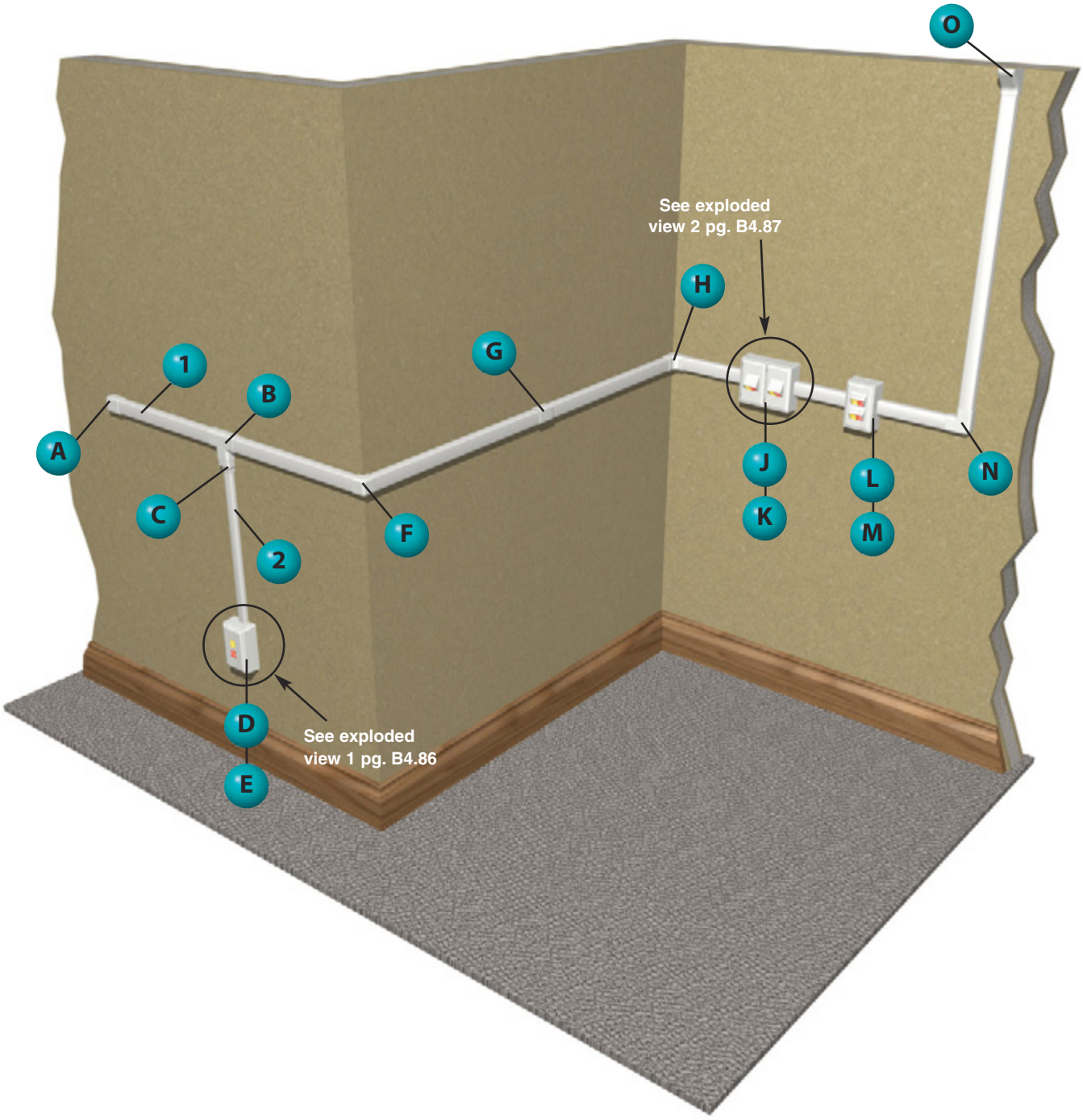
	Components Required	See page
A.	UICFPSE2 = *ULTIMATE ID*® Two-Position Executive Sloped Faceplate.	B3.6
B.	*MINI-COM*® Modules.	Section B2
C.	JBP1D = Power Rated Single Gang Two-Piece Deep Box (screws included).	B4.74
D.	JBD1 = Single Gang Pass-Through Divider for LD2P10 Raceway.	B4.76



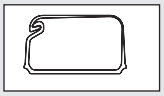
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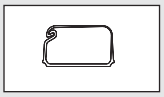
LD Profile Raceway Roadmap



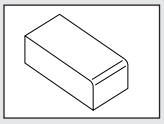
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com



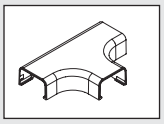
1 **LD10 Raceway (page B4.92)**



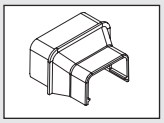
2 **LD5 Raceway (page B4.92)**



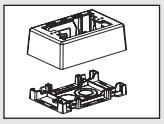
A **ECF10** – End Cap Fitting (page B4.95)**



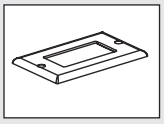
B **TF10** – Tee Fitting (page B4.95)**



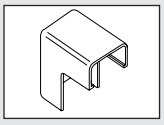
C **RF10X5** – Reducer Fitting (page B4.95)**



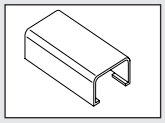
D **JBX3510** – Single Gang Two-Piece Snap-Together Box (page B4.74)**



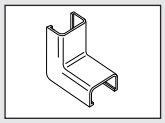
E **CPG** – Single Gang Rectangular Screw-On Faceplate (page B4.71)**



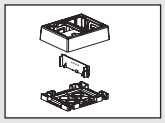
F **OCF10** – Outside Corner Fitting (page B4.95)**



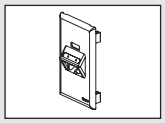
G **CF10** – Coupler Fitting (page B4.95)**



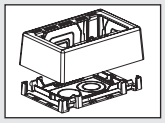
H **ICF10** – Inside Corner Fitting (page B4.95)**



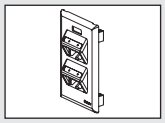
J **JBP2FS** – *FAST-SNAP*™ Double Gang Power Rated Surface Mount Outlet Box(page B4.76)**



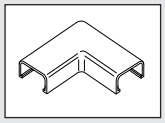
K **UIT70FV2** – *ULTIMATE ID*® 2-Position Sloped Vertical Snap-On Faceplates (page B4.68)**



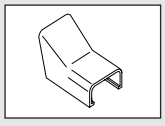
L **JB1FS** – *FAST-SNAP*™ Single Gang Surface Mount Outlet Box (page B4.74)**



M **UIT70FV4** – *ULTIMATE ID*® 4-Position Sloped Vertical Snap-On Faceplates (page B4.68)**



N **RAF10** – Right Angle Fitting (page B4.95)**



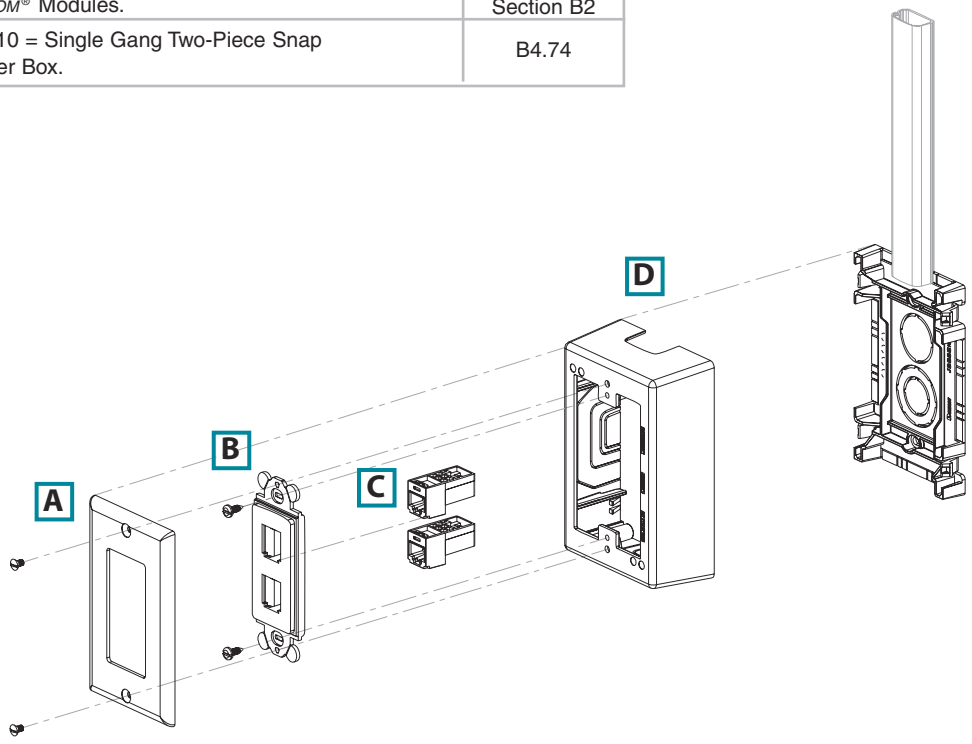
O **DCF10** – Drop Ceiling/Entrance End Fitting (page B4.95)**

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LD Configurations

Exploded View 1

	Components Required	See page
A.	CPG = Single Gang Rectangular Screw-On Faceplate (screws included).	B4.71
B.	CFG2 = *MINI-COM*® Module Frame – 2-Port.	B3.17
C.	*MINI-COM*® Modules.	Section B2
D.	JBX3510 = Single Gang Two-Piece Snap Together Box.	B4.74

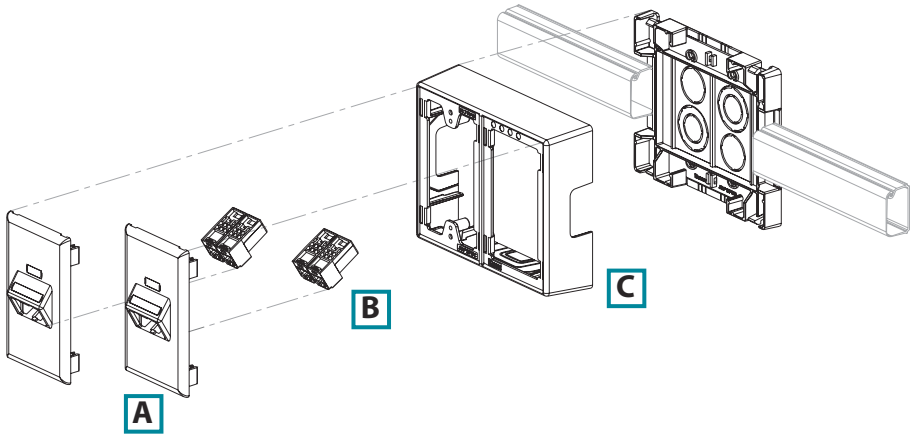


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LD Configurations (continued)

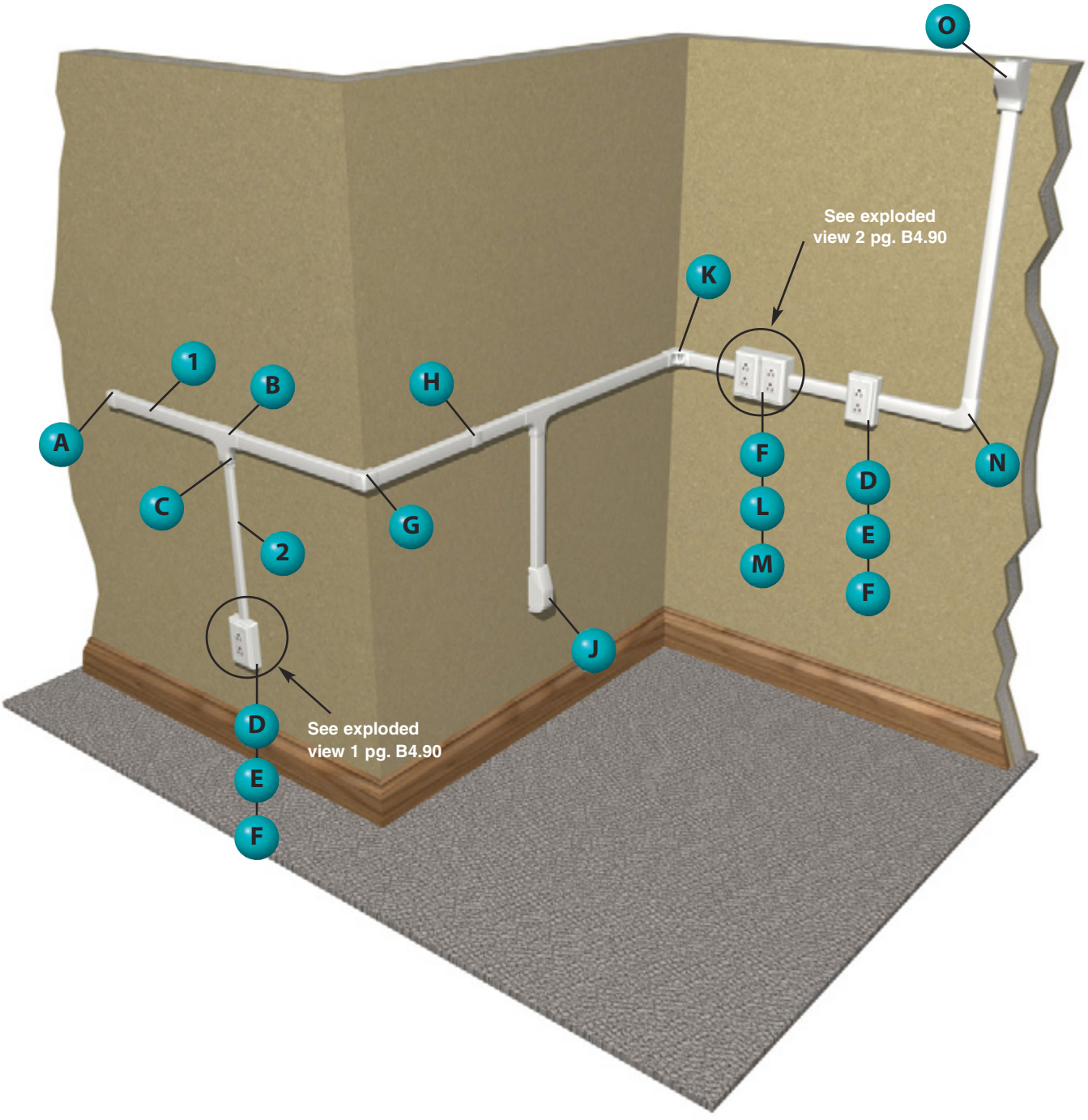
Exploded View 2

	Components Required	See page
A.	UIT70FV2 = *ULTIMATE ID®* Sloped Vertical Snap-On Faceplate – 2-Port.	B4.68
B.	*MINI-COM®* Modules.	Section B2
C.	JBP2FS = *FAST-SNAP™* Double Gang Power Rated Surface Mount Outlet Box.	B4.76

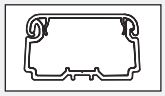


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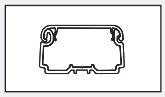
LDPH Profile Raceway Roadmap



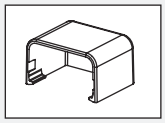
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com



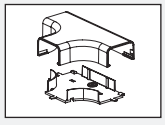
1 LDPH10 – Raceway (page B4.93)



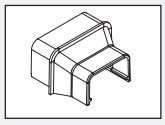
2 LDPH5 – Raceway (page B4.93)



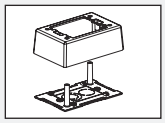
A ECFX10** – Power Rated/1" Bend Radius End Cap Fitting (page B4.97)



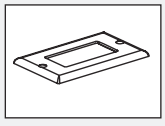
B TFX10** – Power Rated/1" Bend Radius Tee Fitting (page B4.97)



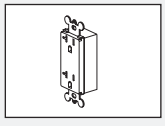
C RFX105** – Power Rated/1" Bend Radius Reducer Fitting (page B4.97)



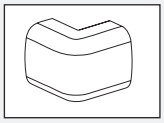
D JBP1** – Power Rated Single Gang Two-Piece Box (page B4.75)



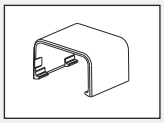
E CPG** – Single Gang Rectangular Screw-On Faceplate (page B4.75)



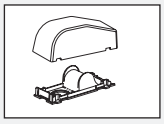
F ERU20** – 20 A Rectangular Electrical Outlet (page B4.72)



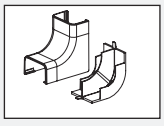
G OCFC10** – Power Rated Outside Corner Fitting (page B4.97)



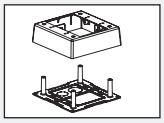
H CFX10** – Power Rated/1" Bend Radius Coupler Fitting (page B4.97)



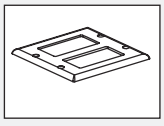
J RAEFX** – Power Rated/1" Bend Radius Right Angle Entrance End Fitting (page B4.97)



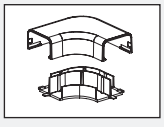
K ICFX10** – Power Rated Inside Corner Fitting (page B4.97)



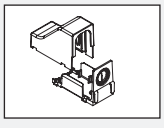
L JBP2** – Power Rated Double Gang Two-Piece Box (page B4.64)



M CPG**-2G – Double Gang Rectangular Screw-On Faceplates (page B4.72)



N RAFX10** – Power Rated Right Angle Fitting (page B4.97)



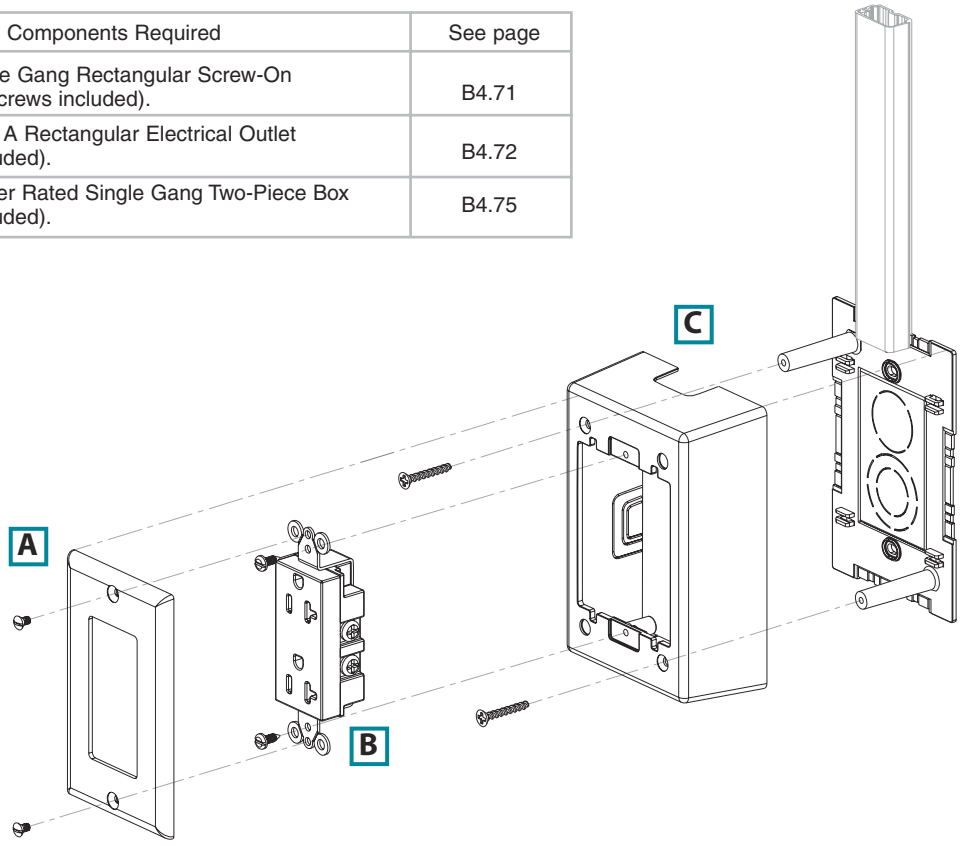
O DCEFX** – Power Rated/1" Bend Radius Drop Ceiling Entrance End Fitting (page B4.97)

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LDPH Configurations

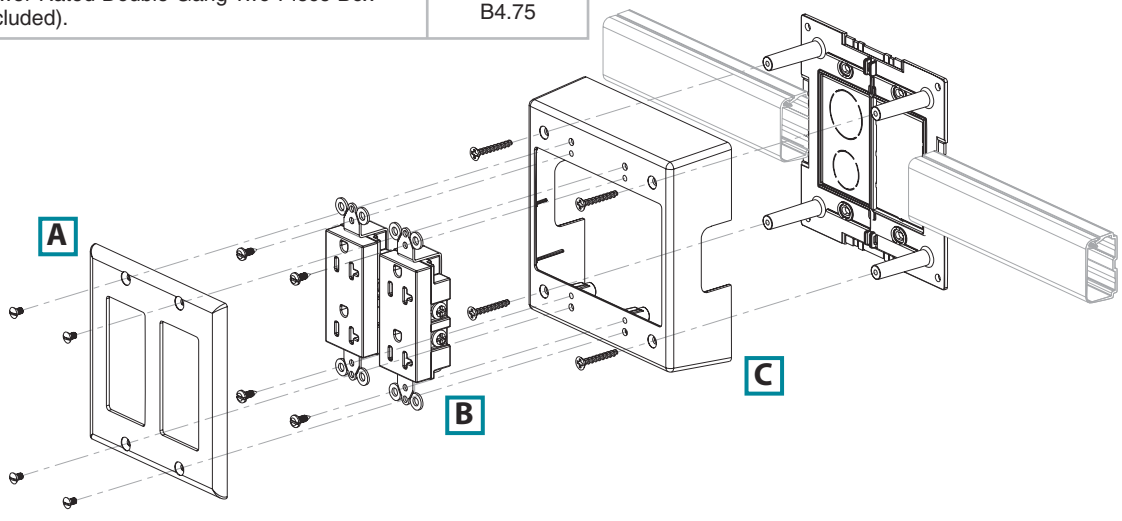
Exploded View 1

	Components Required	See page
A.	CPG = Single Gang Rectangular Screw-On Faceplate (screws included).	B4.71
B.	ERU20 = 20 A Rectangular Electrical Outlet (screws included).	B4.72
C.	JBP1 = Power Rated Single Gang Two-Piece Box (screws included).	B4.75



Exploded View 2

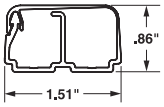
	Components Required	See page
A.	CPG**2G = Double Gang Rectangular Screw-On Faceplate (screws included).	B4.71
B.	ERU20 = 20 A Rectangular Electrical Outlet (screws included).	B4.72
C.	JBP2 = Power Rated Double Gang Two-Piece Box (screws included).	B4.75



Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PAN-WAY® Type LD2P10 Multi-Channel Surface Raceway System

- UL and CSA rated 600 V; meets UL 5A and CSA C22.2 No. 62.1-03 standards; FT4 rated
- Routes power and data together
- One-piece hinged design allows cables to be laid in
- Tamper resistant
- Factory applied adhesive backing speeds installation
- Terminates using JBP1D, JBP2D, JBP2FS or JBP2S surface mount outlet box solutions



LD2P10
Left Internal Area = .43 Sq. In.
Right Internal Area = .50 Sq. In.



LD2P10

Part Number	Part Description	Raceway Size	Color‡	Length (Ft.)	Std. Ctn. Qty.
LD2P10IW8-A	Two channel tamper resistant one-piece latching surface raceway. Supplied with pre-applied adhesive backed tape. Available in 8' and 10' lengths.	1.52" x .86" (39.0mm x 22.0mm)	Off White	8	160
LD2P10IW10-A				10	200

LD2P raceway requires screw mounting if it is being used for power cabling applications.
Order number of feet required in multiples of standard length increments.
‡For other colors replace IW (Off White) with EI (Electric Ivory), IG (International Gray) or WH (White).

Multi-Channel Fittings for LD2P10

- Multi-channel fittings for LD2P10 are designed to maintain the TIA/EIA-568-B and 569-B required minimum bend radius for high performance copper and fiber optic cabling systems



CFX10



RAFX10



ICFX10



OCFX10



TFXD10



ECFX10



EEFX

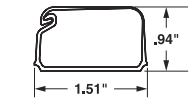
Part Number	Part Description	Color‡	Std. Pkg. Qty.
CFX10IW-X	Coupler fitting for use with LD10, LDPH10, and LD2P10 raceway.	Off White	10
RAFX10IW-X	Right angle fitting for use with LDPH10 and LD2P10 raceway.	Off White	10
ICFX10IW-X	Inside corner fitting for use with LDPH10 and LD2P10 raceway.	Off White	10
OCFX10IW-X	Outside corner fitting for use with LDPH10 and LD2P10 raceway.	Off White	10
TFXD10IW-X	Tee fitting with divided insert to maintain separation of power and data cabling. For use with LD2P10 raceway.	Off White	10
ECFX10IW-X	End cap fitting for use with LDPH10 and LD2P10 raceway.	Off White	10
EEFXIW	Entrance end fitting for LD2P10 raceway. Breakouts for 1/2" and 3/4" diameter conduit.	Off White	1

‡For other colors replace IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).

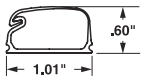
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

PAN-WAY® LD Surface Raceway System

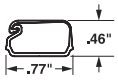
- For routing data and low voltage cabling
- One-piece hinged design allows cables to be laid in
- Factory applied adhesive backing speeds installation
- FT4 rated
- Terminates using surface mount outlet box solutions or *PANDUIT® MINI-COM®* Surface Mount Boxes



LD10
Internal Area = 1.00 Sq. In.

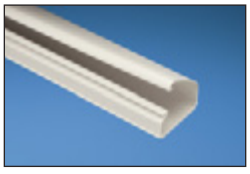


LD5
Internal Area = .38 Sq. In.



LD3
Internal Area = .21 Sq. In.


LD3


LD5


LD10

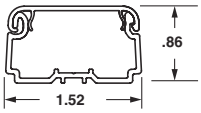
Part Number	Part Description	Raceway Size	Color‡	Length (Ft.)	Std. Ctn. Qty.
LD3 – Surface Raceway					
LD3IW6-A	One-piece latching surface raceway. Supplied with pre-applied adhesive backed tape. Available in 6', 8', and 10' lengths.	.77" x .46" (20.0mm x 12.0mm)	Off White	6	120
LD3IW8-A				8	160
LD3IW10-A				10	200
LD5 – Surface Raceway					
LD5IW6-A	One-piece latching surface raceway. Supplied with pre-applied adhesive backed tape. Available in 6', 8', and 10' lengths.	1.01" x .58" (26.0mm x 15.0mm)	Off White	6	120
LD5IW8-A				8	160
LD5IW10-A				10	200
LD10 – Surface Raceway					
LD10IW6-A	One-piece latching surface raceway. Supplied with pre-applied adhesive backed tape. Available in 6', 8', and 10' lengths.	1.51" x .94" (38.4mm x 24.0mm)	Off White	6	120
LD10IW8-A				8	160
LD10IW10-A				10	200

‡For other colors replace IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).
Order number of feet required in multiples of standard length increments.

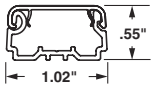
Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

PAN-WAY® LDPH Surface Raceway System

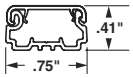
- UL and CSA rated 600 V; meets UL 5A and CSA C22.2 No. 62.1-03 standards; FT4 rated
- Two-piece hinged design allows cables to be laid in
- Tamper resistant
- Factory applied adhesive backing speeds installation
- Terminates using surface mount outlet box solutions or *PANDUIT® MINI-COM®* Surface Mount Boxes



LDPH10
Internal Area = .89 Sq. In.



LDPH5
Internal Area = .33 Sq. In.



LDPH3
Internal Area = .17 Sq. In.


LDPH3


LDPH5


LDPH10

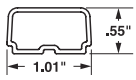
Part Number	Part Description	Raceway Size	Color‡	Length (Ft.)	Std. Ctn. Qty.
LDPH3 – Surface Raceway					
LDPH3IW8-A	Tamper resistant two-piece latching surface raceway. Supplied with pre-punched mounting holes and factory applied adhesive tape. Available in 6', 8', and 10' lengths.	.75" x .41" (20.0mm x 10.4mm)	Off White	8	160
LDPH3IW10-A				10	200
LDPH5 – Surface Raceway					
LDPH5IW8-A	Tamper resistant two-piece latching surface raceway. Supplied with pre-punched mounting holes and factory applied adhesive tape. Available in 6', 8', and 10' lengths.	1.02" x .55" (26.0mm x 14.0mm)	Off White	8	160
LDPH5IW10-A				10	200
LDPH10 – Surface Raceway					
LDPH10IW8-A	Tamper resistant two-piece latching surface raceway. Supplied with pre-punched mounting holes and factory applied adhesive tape. Available in 6', 8', and 10' lengths.	1.52" x .86" (39.0mm x 22.0mm)	Off White	8	160
LDPH10IW10-A				10	200

LDPH raceway requires screw mounting for power cabling applications.
Order number of feet required in multiples of standard length increments.
‡For other colors replace IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).

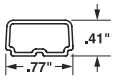
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PAN-WAY® LDS Surface Raceway System

- UL and CSA rated 600 V; meets UL 5A and CSA C22.2 No. 62.1-03 standards; FT4 rated
- Tamper resistant non-hinged design
- Factory applied adhesive backing speeds installation
- Type LDS is **the only non-metallic raceway that is bendable** in low voltage applications to route around and over obstructions
- LDS raceway requires screw mounting using the LMD mounting straps for power cabling installations
- Terminates using surface mount outlet box solutions or *PANDUIT*® *MINI-COM*® Surface Mount Boxes



LDS5
Internal Area = .38 Sq. In.



LDS3
Internal Area = .21 Sq. In.


LDS3

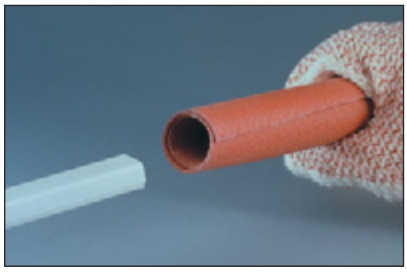

LDS5

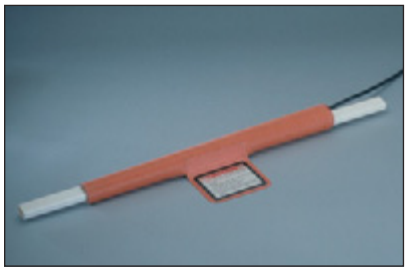

LMD3
LMD5

Part Number	Part Description	Raceway Size	Color‡	Length (Ft.)	Std. Ctn. Qty.
LDS3 – Surface Raceway					
LDS3IW10-A	Tamper resistant one-piece surface raceway. Supplied with pre-applied adhesive backed tape. Available in 10' lengths.	.77" x .41" (20.0mm x 10.4mm)	Off White	10	200
LDS5 – Surface Raceway					
LDS5IW10-A	Tamper resistant one-piece surface raceway. Supplied with pre-applied adhesive backed tape. Available in 10' lengths.	1.01" x .55" (26.0mm x 14.0mm)	Off White	10	200
Mounting Straps					
LMD3IW-Q	For use with LDS3 raceway.	Size 3	Off White	—	100
LMD5IW-Q	For use with LDS5 raceway.	Size 5	Off White	—	100

‡For other colors replace IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).
Order number of feet required in multiples of standard length increments.

Method for Bending Type LDS Raceway (Low Voltage Applications)


STEP 1: Slide 18" to 30" section of LDS raceway into PVC pipe heating blanket.
*(Recommended blanket designed for bending 1/2" to 1 1/2" PVC conduit.)


STEP 2: Allow section to heat approximately two to three minutes. Raceway will be soft and pliable, but should not stretch. (Time will vary with blanket temperature and raceway size.)

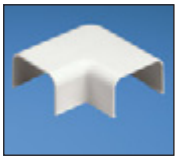

STEP 3: Remove raceway section from blanket and hold in desired position until the raceway cools. Install mounting straps immediately.

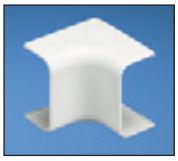
*Heating blanket not offered by *PANDUIT*.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Standard Fittings for Low Voltage Applications


CF


RAF

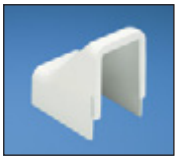

ICF


OCF


TF


ECF


CRFC


DCF


FBA


RF

Part Number	Part Description	Color‡	Std. Pkg. Qty.
CF3IW-E	Coupler fitting for use with LD3 raceway.	Off White	20
CF5IW-E	Coupler fitting for use with LD5 raceway.	Off White	20
CF10IW-X	Coupler fitting for use with LD10 raceway.	Off White	10
RAF3IW-E	Right angle fitting for use with LD3 raceway.	Off White	20
RAF5IW-E	Right angle fitting for use with LD5 raceway.	Off White	20
RAF10IW-X	Right angle fitting for use with LD10 raceway.	Off White	10
ICF3IW-E	Inside corner fitting for use with LD3 raceway.	Off White	20
ICF5IW-E	Inside corner fitting for use with LD5 raceway.	Off White	20
ICF10IW-X	Inside corner fitting for use with LD10 raceway.	Off White	10
OCF3IW-E	Outside corner fitting for use with LD3 raceway.	Off White	20
OCF5IW-E	Outside corner fitting for use with LD5 raceway.	Off White	20
OCF10IW-X	Outside corner fitting for use with LD10 raceway.	Off White	10
TF3IW-E	Tee fitting for use with LD3 raceway.	Off White	20
TF5IW-E	Tee fitting for use with LD5 raceway.	Off White	20
TF10IW-X	Tee fitting for use with LD10 raceway.	Off White	10
ECF3IW-E	End cap fitting for use with LD3 raceway.	Off White	10
ECF5IW-E	End cap fitting for use with LD5 raceway.	Off White	10
ECF10IW-X	End cap fitting for use with LD10 raceway.	Off White	10
CRFC5IW-X	Four way cross fitting for use with LD5, LDPH5, and LDS5 raceway.	Off White	10
DCF3IW-X	Drop ceiling/entrance end fitting for use with LD3 raceway.	Off White	10
DCF5IW-X	Drop ceiling/entrance end fitting for use with LD5 raceway.	Off White	10
DCF10IW-X	Drop ceiling/entrance end fitting for use with LD10 raceway.	Off White	10
FBA5IW-X	Fire box adapter for use with LD5/LDPH5 profile raceway. Note: For low voltage applications only.	Off White	10
FBA10IW-X	Fire box adapter for use with LD10/LDPH10 profile raceway. Note: For low voltage applications only.	Off White	10
RF5X3IW-E	Reducer fitting for LD raceway from size 5 to size 3. For use with LD5 and LD3 raceway. For in-line terminations, use with CF5**.	Off White	20
RF10X3IW-X	Reducer fitting for LD raceway from size 10 to size 3. For use with LD3 and LD10 raceway. For in-line terminations, use with CF10**.	Off White	10
RF10X5IW-X	Reducer fitting for LD raceway from size 10 to size 5. For use with LD5 and LD10 raceway. For in-line terminations, use with CF10**.	Off White	10

‡For other colors replace IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).

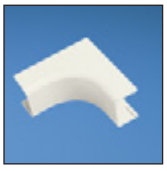
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One Inch Bend Radius Fittings for TIA/EIA Compliance

- One inch bend radius fittings are designed to maintain the TIA/EIA-568-B and 569-B required minimum bend radius for high performance copper and fiber optic cabling systems


CFX

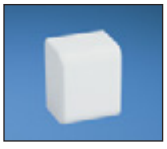

RAFC


ICFC


OCFX


TFC


CRFC5


ECFX


DCEFX


RAEFX


RFX

Part Number	Part Description	Color‡	Std. Pkg. Qty.
CFX3IW-X	Coupler fitting for use with LD3, LDPH3, and LDS3 raceway.	Off White	10
CFX5IW-X	Coupler fitting for use with LD5, LDPH5, and LDS5 raceway.	Off White	10
CFX10IW-X	Coupler fitting for use with LD10, LDPH10, and LD2P10 raceway.	Off White	10
RAFC3IW-X	Right angle fitting for use with LD3, LDPH3, and LDS3 raceway.	Off White	10
RAFC5IW-X	Right angle fitting for use with LD5, LDPH5, and LDS5 raceway.	Off White	10
RAFC10IW-X	Right angle fitting for use with LD10 and LDPH10 raceway.	Off White	10
ICFC3IW-X	Inside corner fitting for use with LD3, LDPH3, and LDS3 raceway.	Off White	10
ICFC5IW-X	Inside corner fitting for use with LD5, LDPH5, and LDS5 raceway.	Off White	10
ICFC10IW-X	Inside corner fitting for use with LD10 and LDPH10 raceway.	Off White	10
OCFX3IW-X	Outside corner fitting for use with LDPH3 and LDS3 raceway.	Off White	10
OCFX5IW-X	Outside corner fitting for use with LDPH5 and LDS5 raceway.	Off White	10
OCFX10IW-X	Outside corner fitting for use with LDPH10 and LD2P10 raceway.	Off White	10
TFC3IW-X	Tee fitting for use with LD3, LDPH3, and LDS3 raceway.	Off White	10
TFC5IW-X	Tee fitting for use with LD5, LDPH5, and LDS5 raceway.	Off White	10
TFC10IW-X	Tee fitting for use with LD10 and LDPH10 raceway.	Off White	10
CRFC5IW-X	Four way cross fitting for use with LD5, LDPH5, and LDS5 raceway.	Off White	10
ECFX3IW-X	End cap fitting for use with LDPH3 and LDS3 raceway.	Off White	10
ECFX5IW-X	End cap fitting for use with LDPH5 and LDS5 raceway.	Off White	10
ECFX10IW-X	End cap fitting for use with LDPH10 and LD2P10 raceway.	Off White	10
DCEFXIW-X	Drop ceiling/entrance end fitting for use with LD3, LDPH3, LDS3, LD5, LDPH5, LDS5, LD10 and LDPH10 raceway. Use CA3 or CA5 adapters for LD3 or LD5 profile raceway.	Off White	10
RAEFXIW-X	Right angle/entrance end fitting for use with LD3, LDPH3, LDS3, LD5, LDPH5, LDS5, LD10 and LDPH10 raceway. CA3 or CA5 adapters for LD3 or LD5 profile raceway.	Off White	10
RFX53IW-X	Reducer fitting for use with LD3, LDPH3, LDS3, LD5, LDPH5 and LDS5 raceway. For in-line terminations, use with CFX5**.	Off White	10
RFX103IW-X	Reducer fitting for use with LD3, LDPH3, LD10 and LDPH10 raceway. For in-line terminations, use with CFX10**.	Off White	10
RFX105IW-X	Reducer fitting for use with LD5, LDPH5, LDS5, LD10 and LDPH10 raceway. For in-line terminations, use with CFX10**.	Off White	10

‡For other colors replace IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Power Rated Fittings for Power to 600 V – LDPH/LDS/LD2P Raceway Only


CFX


RAFX


ICFX


OCFC


TFX


CRFX


CEFX


ECFX


DCEFX


RAEFX


RFX

Part Number	Part Description	Color‡	Std. Pkg. Qty.
CFX3IW-X	Coupler fitting for use with LD3, LDPH3, and LDS3 raceway.	Off White	10
CFX5IW-X	Coupler fitting for use with LD5, LDPH5, and LDS5 raceway.	Off White	10
CFX10IW-X	Coupler fitting for use with LD10, LDPH10, and LD2P10 raceway.	Off White	10
RAFX3IW-X	Right angle fitting for use with LDPH3 and LDS3 raceway.	Off White	10
RAFX5IW-X	Right angle fitting for use with LDPH5 and LDS5 raceway.	Off White	10
RAFX10IW-X	Right angle fitting for use with LDPH10 and LD2P10 raceway.	Off White	10
ICFX3IW-X	Inside corner fitting for use with LDPH3 and LDS3 raceway.	Off White	10
ICFX5IW-X	Inside corner fitting for use with LDPH5 and LDS5 raceway.	Off White	10
ICFX10IW-X	Inside corner fitting for use with LDPH10 and LD2P10 raceway.	Off White	10
OCFC3IW-X	Outside corner fitting for use with LDPH3 and LDS3 raceway.	Off White	10
OCFC5IW-X	Outside corner fitting for use with LDPH5 and LDS5 raceway.	Off White	10
OCFC10IW-X	Outside corner fitting for use with LDPH10 raceway only.	Off White	10
TFX3IW-X	Tee fitting for use with LDPH3 and LDS3 raceway.	Off White	10
TFX5IW-X	Tee fitting for use with LDPH5 and LDS5 raceway.	Off White	10
TFX10IW-X	Tee fitting for use with LDPH10 raceway only.	Off White	10
CRFX5IW-X	Four way cross fitting for use with LD5, LDPH5, and LDS5 raceway.	Off White	10
CEFXIW-X	Conduit entrance end fitting. This power rated two-piece fitting is designed to accommodate the entrance of 1/2" conduit or align with knockouts on surface mount electrical boxes. For use with LD3/LDPH3 and has breakouts available to work with LD5/LDPH5 and LD10/LDPH10. Cover and base snap together – no hardware is required.	Off White	10
ECFX3IW-X	End cap fitting for use with LDPH3 and LDS3 raceway.	Off White	10
ECFX5IW-X	End cap fitting for use with LDPH5 and LDS5 raceway.	Off White	10
ECFX10IW-X	End cap fitting for use with LDPH10 and LD2P10 raceway.	Off White	10
DCEFXIW-X	Drop ceiling/entrance end fitting for use with LD3, LDPH3, LDS3, LD5, LDPH5, LDS5, LD10 and LDPH10 raceway. Use CA3 or CA5 adapters for LD3 or LD5 profile raceway.	Off White	10
RAEFXIW-X	Right angle/entrance end fitting for use with LD3, LDPH3, LDS3, LD5, LDPH5, LDS5, LD10 and LDPH10 raceway. CA3 or CA5 adapters for LD3 or LD5 profile raceway.	Off White	10
RFX53IW-X	Reducer fitting for use with LD3, LDPH3, LDS3, LD5, LDPH5 and LDS5 raceway. For in-line terminations, use with CFX5**.	Off White	10
RFX103IW-X	Reducer fitting for use with LD3, LDPH3, LD10 and LDPH10 raceway. For in-line terminations, use with CFX10**.	Off White	10
RFX105IW-X	Reducer fitting for use with LD5, LDPH5, LDS5, LD10 and LDPH10 raceway. For in-line terminations, use with CFX10**.	Off White	10

‡For other colors replace IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).

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Raceway Adapters for LD Raceway

- Fits into universal breakout of DCEFX or RAEFX fittings
- For use with types LD3, LDPH3, LDS3, LD5, LDPH5 and LDS5 raceway



CA3
CA5

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
CA3IW-X	Adapter fits into universal breakout of DCEFX or RAEFX fittings. For use LD3, LDPH3, and LDS3 raceway.	Off White	10	50
CA5IW-X	Adapter fits into universal breakout of DCEFX or RAEFX fittings. For use LD5, LDPH5, and LDS5 raceway.	Off White	10	50

‡For other colors replace IW (Off White) with EI (Electric Ivory), IG (International Gray), or WH (White).

Cable Fill Capacities for LD Profile Raceway

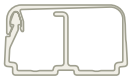
This information is to be used as a guide in selecting the proper size raceway. The maximum amounts may vary according to the cable installation methods, straightness of cables, etc.



LD3	LD5	LD10
.21 in.²	**.38 in.²**	**1.00 in.²**



LDPH3	LDPH5	LDPH10
.21 in.²	**.38 in.²**	**98 in.²**



LD2P10 – Left	LDP210 – Right
.43 in.²	**.50 in.²**



LDS3	LDS5
.21 in.²	**.38 in.²**

SPEC = 40% cable fill – The recommended design in cable capacity, leaves room for future moves, adds, and changes.

MAX for Data = 60% cable fill – The maximum cable quantity based on cable interweaving and packing factors.

Raceway Type and Configuration	Fill Area (In.²)	Electrical Cables			Data Grade Cables		Data Grade Cables		Audio/Video		Fiber Optic Cable	
		14 AWG	12 AWG	10 AWG	23 AWG/UTP CM		23/24 AWG/UTP		RG6		2 Strand	
		THHN/T90			Augmented Cat. 6		Category 6 (4-pr.)					
		0.111	0.130	0.164	DIA. = .354		DIA. = .250		DIA. = .275		DIA. = .175	
		FILL			FILL		FILL		FILL		FILL	
		MAX	MAX	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX
		(UL Temp Rise Test)			(40%)	(60%)	(40%)	(60%)	(40%)	(60%)	(40%)	(60%)
LD3	.21	—	—	—	0	1	1	2	1	2	3	5
LD5	.38	—	—	—	1	2	3	4	2	3	6	9
LD10	1.00	—	—	—	4	6	8	12	5	8	16	24
LDPH3	.17	9	7	4	0	1	1	2	1	1	2	4
LDPH5	.33	14	12	8	1	2	2	4	2	3	5	8
LDPH10	.89	18	18	16	3	5	7	10	5	8	14	22
LD2P10 – Left channel	.43	14	11	8	—	—	—	—	—	—	—	—
LD2P10 – Right channel	.50	—	—	—	2	3	4	6	3	4	8	12
LDS3	.21	9	6	4	0	1	1	2	1	2	3	5
LDS5	.38	10	8	5	1	2	3	4	2	3	6	9

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PAN-POLE™ POWER AND COMMUNICATION POLES

PAN-POLE™ Power and Communication Poles provide industry-leading solutions for cable routing in the open office environment. Available with pre-terminated electrical outlets with divided channel for power and communication applications or as an open channel communication pole.





- Tamper resistant cover
- Bend radius control fitting (above ceiling) as required by TIA/EIA-568-B and 569-B.
- Complete with ceiling and floor mounting hardware

PAN-POLE™ Power and Communication Poles accept NEMA standard 70mm screw-on faceplates or superior PAN-WAY® Snap-On Faceplates.

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PAN-POLE™ Power Pole

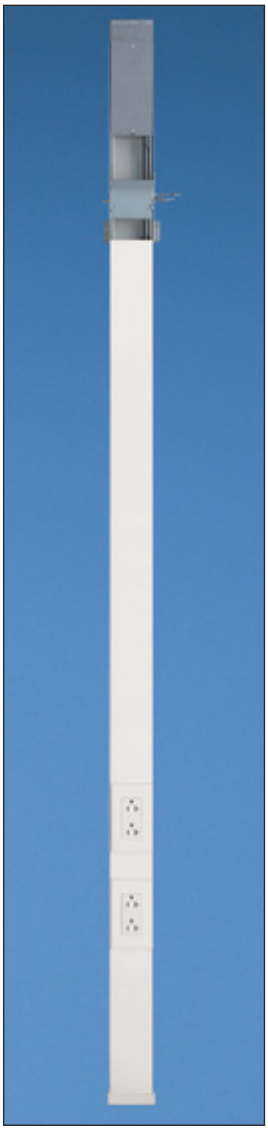
- Dual channel aluminum pole is equipped with pre-terminated electrical outlets and provides channel separation for the installation of communication cabling and modules
- UL and CSA rated 600 V
- Available in 11' or 13' lengths and supplied with a non-metallic cover
- Electrical outlets are pre-wired

Pre-installed components include:

1. Blank non-metallic cover
2. Two 20 A factory wired rectangular outlets with wiring fed through power channel to base of power entry box
3. Power entry with 1/2" and 3/4" conduit breakouts
4. Removable plate for power wiring connections
5. Ground screw pre-mounted behind removable plate

Supplied mounting hardware includes:

1. Entry end bend radius fitting
2. Ceiling T-bar bracket
3. Ceiling tile trim plate
4. End cap
5. End cap floor grip pad



PCPA11R20
PCPA13R20

Part Number	Part Description	Color‡	Std. Pkg. Qty.
PCPA11R20IW	PAN-POLE™ Power Pole Assembly is supplied in 11' length for maximum ceiling height of 10'. Dual channel design allows for the installation of communication outlets.	Off White	1
PCPA13R20IW	PAN-POLE™ Power Pole Assembly is supplied in 13' length for maximum ceiling heights of 12'. Dual channel design allows for the installation of communication outlets.	Off White	1

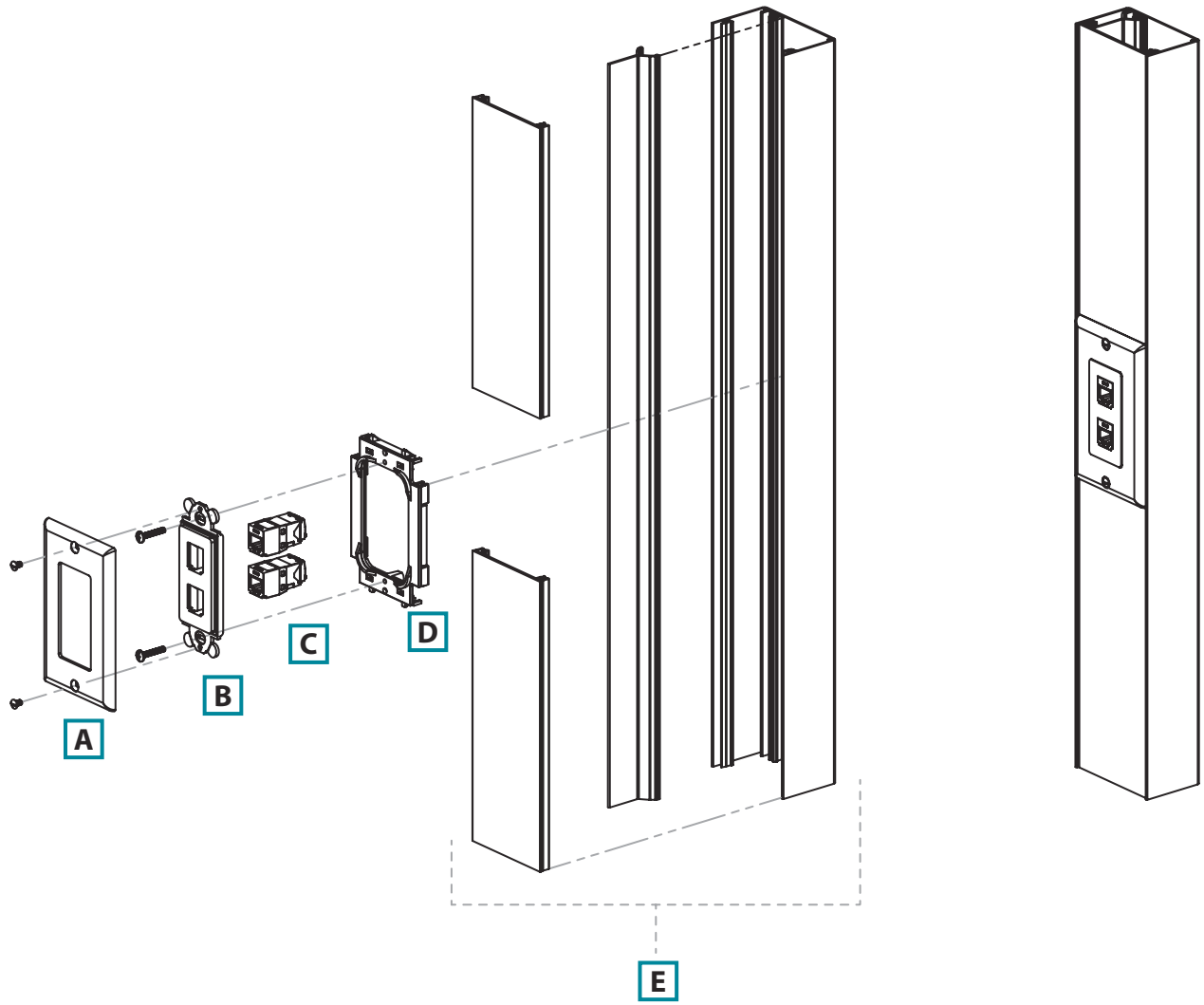
Communication components sold separately.
‡For other colors replace IW (Off White) with EI (Electric Ivory).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Installation of Communication Outlets on PAN-POLE™ Power Pole

Utilizing Standard Screw-On Faceplates

	Components Required	See page
A.	CPG** = Single Gang Rectangular Screw-On Faceplate (screws included).	B4.71
B.	CFG2** = MINI-COM® Module Frame – 2-Port.	B3.17
C.	MINI-COM® Modules.	Section B2
D.	T70SDB-X = Standard Faceplate Bracket.	B4.106
E.	PCPA**R20 Power Pole.	B4.100

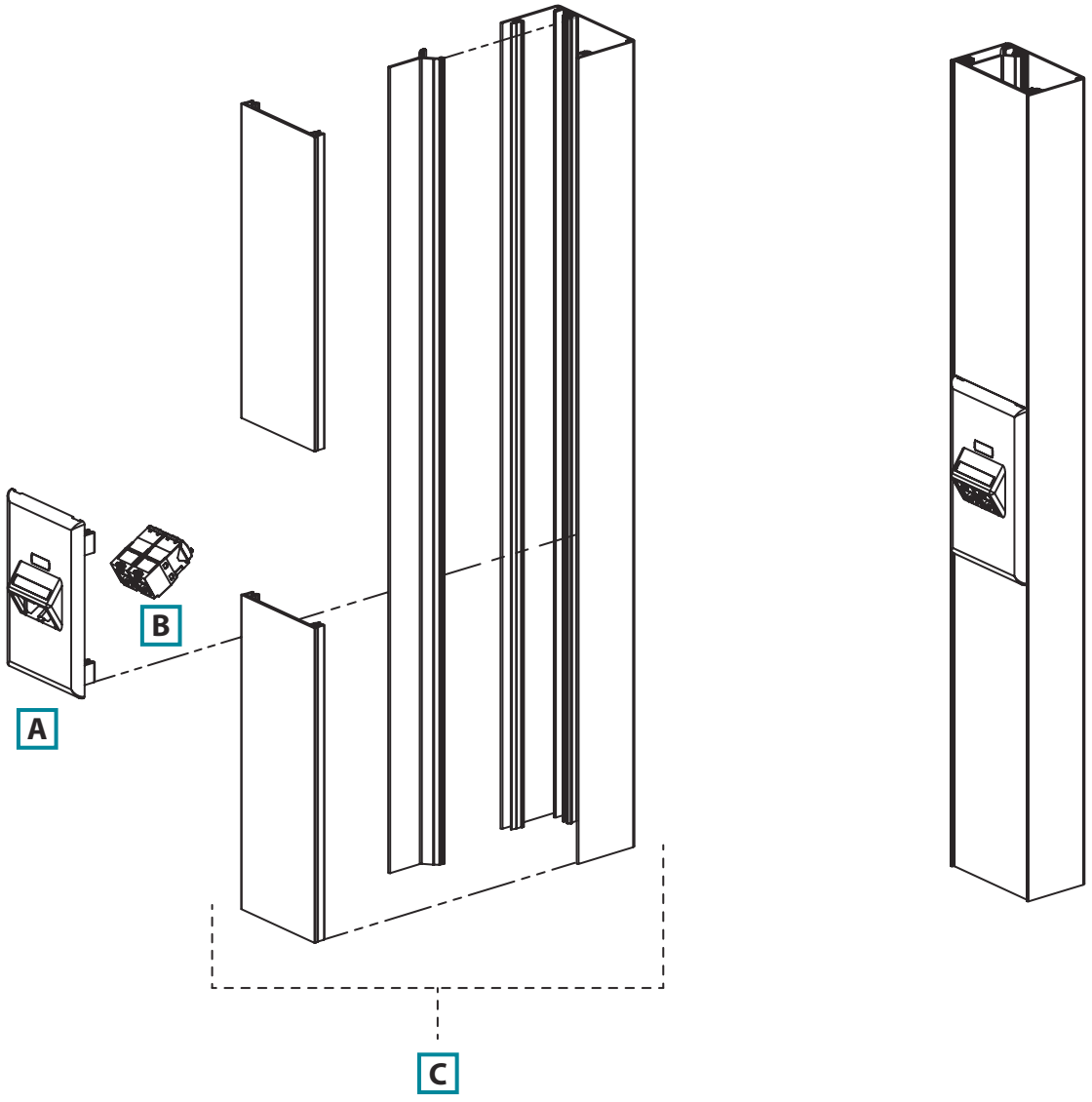


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Installation of Communication Outlets on *PAN-POLE*™ Power Pole (continued)

Utilizing *PANDUIT* Snap-On Faceplates

	Components Required	See page
A.	UIT70FV2** = Single Gang Vertical Sloped Communication Snap-On Faceplate.	B4.68
B.	*MINI-COM*® Modules.	Section B2
C.	PCPA**R20 Power Pole.	B4.100



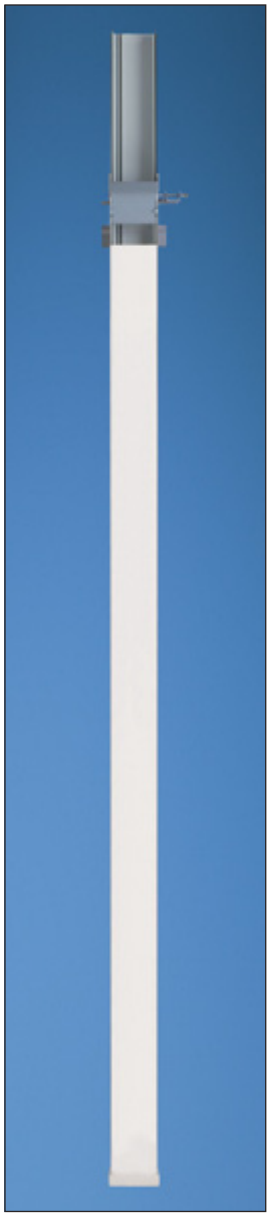
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PAN-POLE™ Communication Pole

- Single channel aluminum pole for routing low voltage communication cabling only
- Poles are available in 11' or 13' lengths and are supplied with a non-metallic cover

Supplied mounting hardware includes:

1. Entry end bend radius fitting
2. Ceiling T-bar bracket
3. Ceiling tile trim plate
4. End cap
5. End cap floor grip pad



PCPA11
PCPA13

Part Number	Part Description	Color‡	Std. Pkg. Qty.
PCPA11IW	PAN-POLE™ Communication Pole Assembly is supplied in 11' length for maximum ceiling height of 10'.	Off White	1
PCPA13IW	PAN-POLE™ Communication Pole Assembly is supplied in 13' length for maximum ceiling height of 12'.	Off White	1

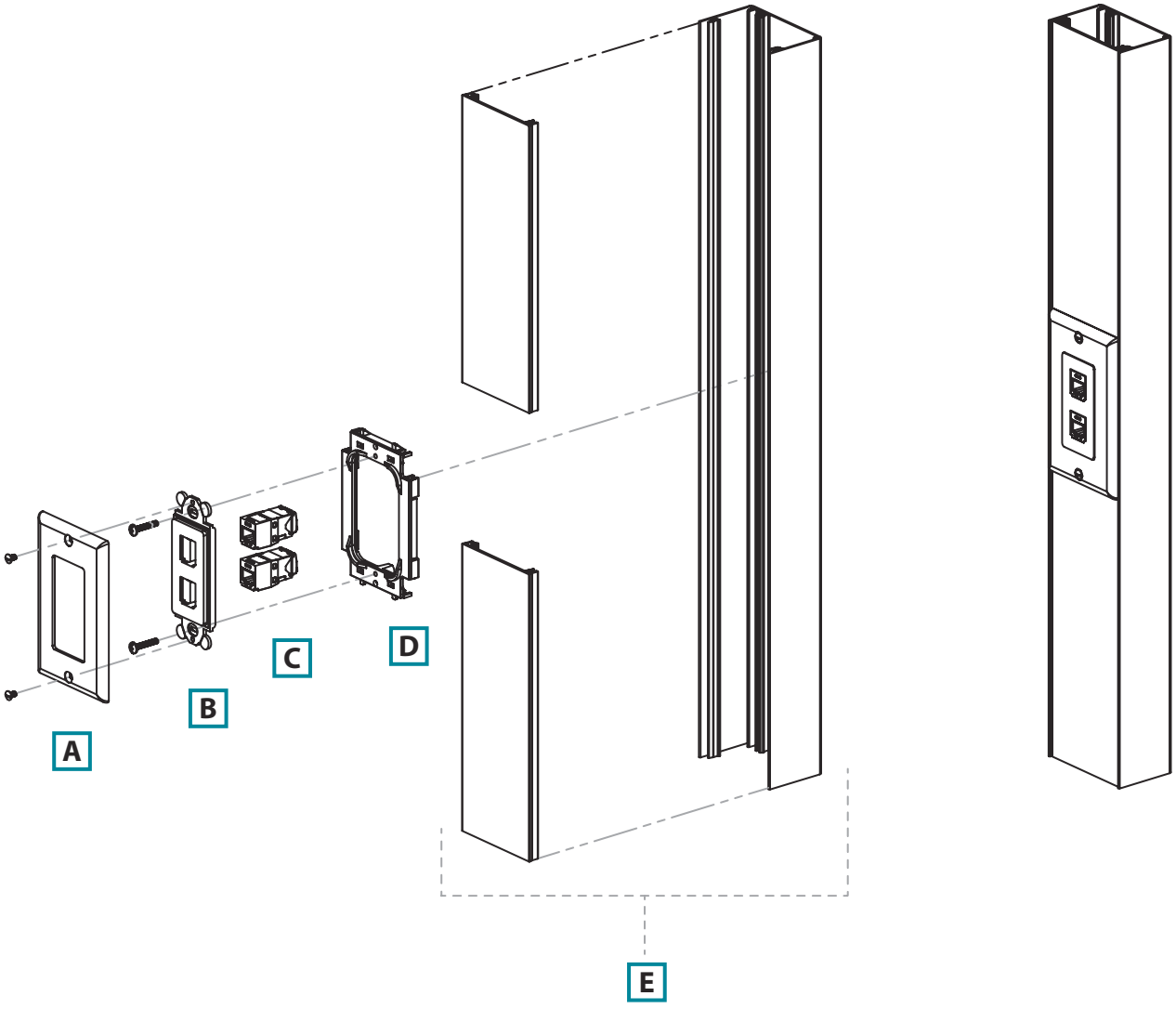
Communication components sold separately.
‡For other colors replace IW (Off White) with EI (Electric Ivory).

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Installation of Communication Outlets on *PAN-POLE*™ Communication Pole

Utilizing Standard Screw-On Faceplates

	Components Required	See page
A.	CPG** = Single Gang Rectangular Screw-On Faceplate (screws included).	B4.71
B.	CFG2** = *MINI-COM*® Module Frame – 2-Port.	B3.17
C.	*MINI-COM*® Modules.	Section B2
D.	T70SDB-X = Standard Faceplate Bracket.	B4.106
E.	PCPA** = Communication Pole.	B4.103

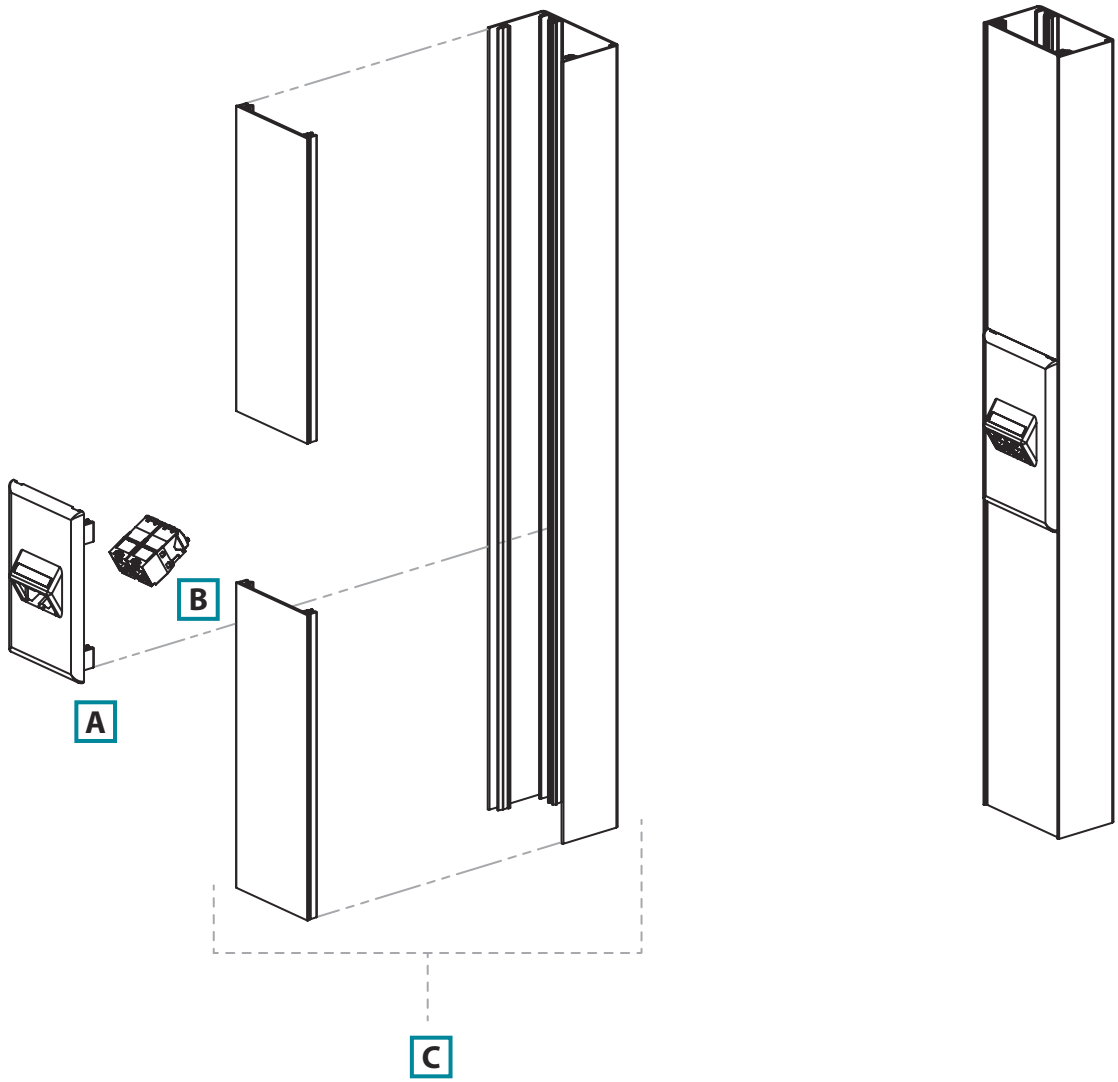


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Installation of Communication Outlets on *PAN-POLE*™ Communication Pole (continued)

Utilizing *PANDUIT* Snap-On Faceplates

	Components Required	See page
A.	UIT70FV2** = Single Gang Vertical Sloped Communication Snap-On Faceplate.	B4.68
B.	*MINI-COM*® Modules.	Section B2
C.	PCPA** = Communication Pole.	B4.103



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PAN-POLE™ Extension Kits



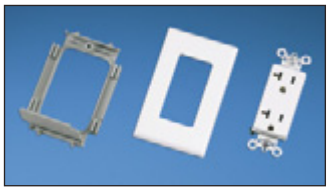
PCPAK22
PCPAK16

Part Number	Part Description	Color‡	Std. Pkg. Qty.
PCPAK22IW	PAN-POLE™ Extension Kit. To extend the 11' pole to 22'. Extension kit includes: Fully assembled 11' pole with brace/coupler, additional wiring and screws. Note: Customer needs to purchase a separate standard 11' pole to make the required length.	Off White	1
PCPAK16IW	PAN-POLE™ Extension Kit. To extend the 13' pole to 16'. Extension kit includes: fully assembled 3' pole with brace/coupler, additional wiring and screws. Note: Customer needs to purchase a separate standard 13' pole to make the required length.	Off White	1

All product color is (IW) Off White.

PAN-POLE™ Power Addition Kits and Standard Faceplate Bracket

- Power addition kits (UL listed for field installation) provide for the addition of power outlets
- Allow for the installation of up to three additional duplex outlets (five outlets max.)
- Outlets may be added to the existing factory wired circuit or one additional circuit may be added



PCPAKR20



PCPAKR



T70SDB-X

Part Number	Part Description	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
PCPAKR20IW	Power addition kit includes 20 A rectangular outlet with two mounting screws, outlet mounting bracket with one mounting screw and snap-on faceplate.	Off White	1	10
PCPAKRIW	Power addition kit includes outlet mounting bracket with one mounting screw and snap-on faceplate. *Rectangular power outlet purchased separately.*	Off White	1	10
T70SDB-X	Standard faceplate bracket. Used to mount NEMA standard 70mm single gang screw-on faceplates. Can be used with T-70, Twin-70, TG-70 raceway and PAN-POLE™ Communication Pole.	Gray	10	—

‡For other colors replace IW (Off White) with EI (Electric Ivory).
When purchasing power addition kit with 20 A outlet, use with PAN-POLE™ Power Pole, PCPA11R20IW and PCPA13R20IW.
When purchasing power addition it without outlet, rectangular power outlet needs to be purchased separately. Use with PAN-POLE™ Power Pole, PCPA11R20EI and PCPA13R20EI.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PAN-POLE™ Replacement Parts



PCPKIT



PCPTP



PCPEC



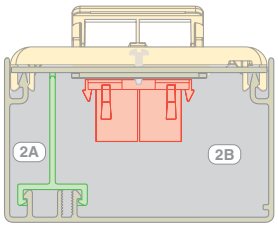
PCPBRC

Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
PCPKITIW	Replacement parts includes: bend radius control ramp, two thumb screws, one two-piece ceiling trim plate and one end cap with floor grip pad. Also available in EI (Electric Ivory).	Off White	1	5
PCPTPIW	Replacement ceiling trim plate.	Off White	1	—
PCPECIW	Replacement end cap with floor grip pad. Also available in EI (Electric Ivory).	Off White	1	—
PCPBRC	Replacement bend radius control ramp with T-bar bracket for attaching pole to T-bar. Includes mounting screws.	Gray	1	—

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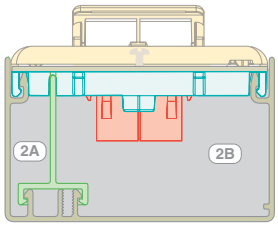
Cable Fill Capacities for PAN-POLE™ Power and Communication Poles

The maximum amounts may vary according to the cable installation methods, straightness of cables, etc.



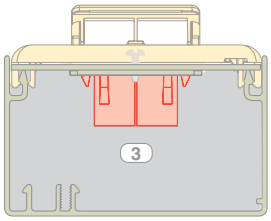
A = .47 in.² | A = 2.75 in.²

Cable fill #1: Power pole with data terminals using vertical sloped snap-on communication faceplate.



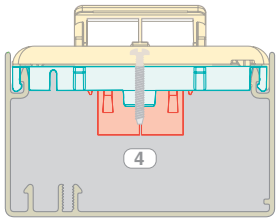
A = .43 in.² | A = 2.15 in.²

Cable fill #2: Power pole with data terminals using sloped screw-on communication faceplate.



A = 3.47 in.²

Cable fill #3: Communication pole using vertical sloped snap-on communication faceplate.



A = 2.83 in.²

Cable fill #4: communication pole using sloped screw-on communication faceplate.

SPEC = 40% cable fill – The recommended design in cable capacity, leaves room for future moves, adds, and changes.

MAX for Data = 60% cable fill – The maximum cable quantity based on cable interweaving and packing factors.

MAX for Power cable fill – The maximum of electrical cables based on UL temperature rise test.

	Raceway Type and Configuration	Fill Area (In.²)	Electrical Cables			Data Grade Cables		Data Grade Cables		Audio/Video		Fiber Optic Cable	
			14 AWG	12 AWG	10 AWG	23 AWG/UTP CM		23/24 AWG/UTP CM		RG6		2 Strand	
			THHN/T90			Augmented Cat. 6		Category 6 (4-pr.)					
			0.111	0.130	0.164	DIA.=.354		DIA.=.250		DIA. = .275		DIA. = .175	
			FILL			FILL		FILL		FILL		FILL	
			MAX	MAX	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX	SPEC	MAX
			(UL Temp Rise Test)			(40%)	(60%)	(40%)	(60%)	(40%)	(60%)	(40%)	(60%)
1A.	Power and communication: Snap-on faceplates (power).	.47	—	11	—	—	—	—	—	2	4	7	11
1B.	Communication.	2.75	—	—	—	11	17	22	33	15	22	45	68
2A.	Power and communication: Screw-on faceplates (power).	.43	—	11	—	—	—	—	—	2	3	7	10
2B.	Communication.	2.15	—	—	—	8	13	17	26	11	17	35	53
3.	Communication only Snap-on faceplate.	3.47	—	—	—	14	21	28	42	18	28	57	86
4.	Communication only: Screw-on faceplates.	2.83	—	—	—	11	17	23	34	15	22	47	70

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PANZONE® ZONE CABLING SYSTEMS

PANDUIT provides a complete line of zone cabling products for open office architecture applications, telecommunication enclosures, data centers, wireless deployments and network integration of Building Automation Systems. Each zone cabling product serves as a main distribution point for a particular zone increasing network flexibility, manageability, accessibility and efficiency. Utilizing a distributed network and a zone cabling topology for your physical infrastructure can solve telecommunication room congestion. In addition, centralized fiber backbone cables can be integrated into the solution in order to extend the reach of your network beyond copper limitations.



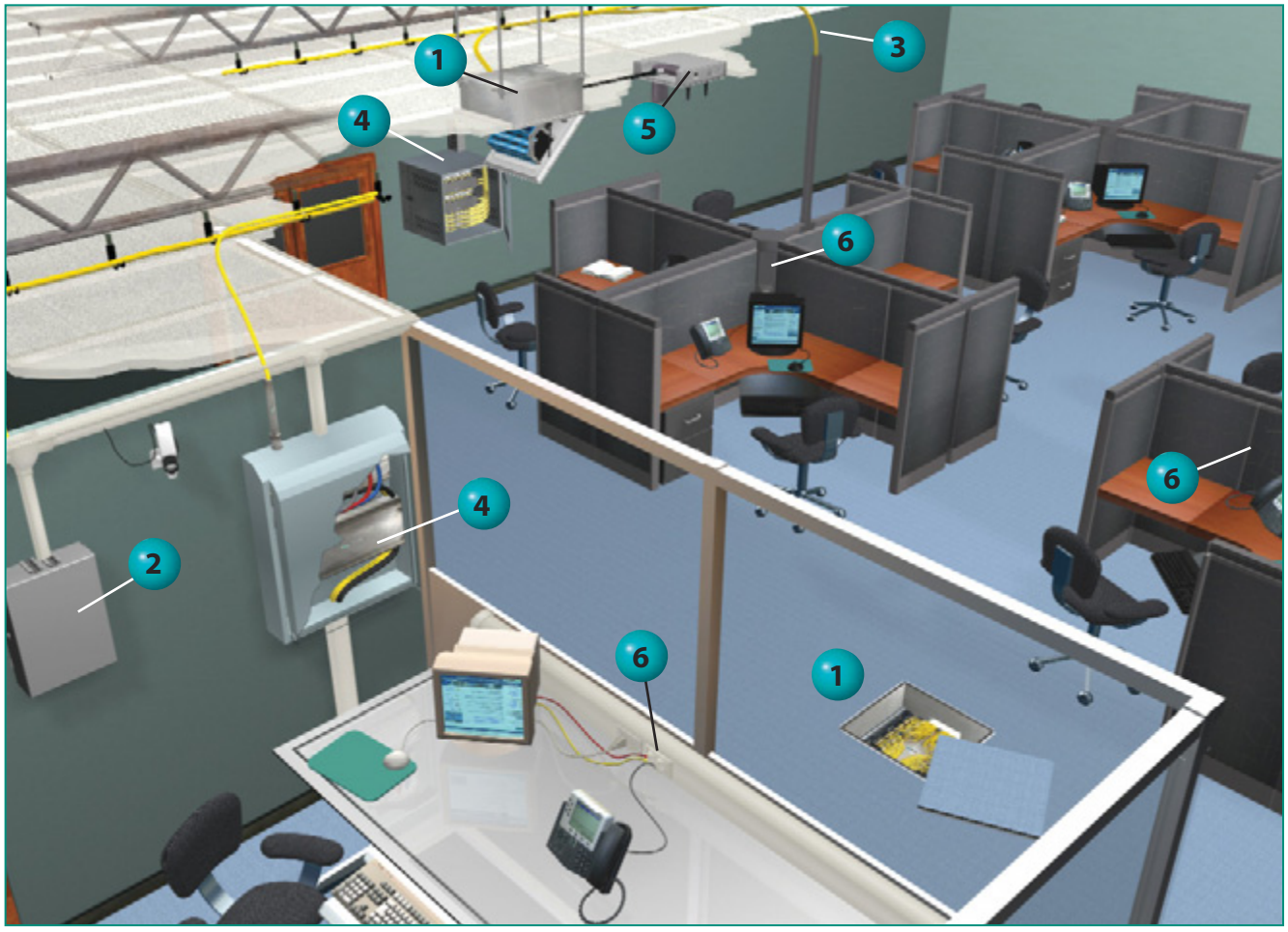
- **Consolidation points, MuTOA, and telecommunication enclosures can be used to create a zone cabling system that is TIA/EIA-568-B, 569-B, and 942 compliant**
- **Provide accessibility and flexibility to reconfigure offices to meet frequently changing organizational requirements**
- **Provide the ability to make moves, adds, and changes quickly and easily**
- **Reduce network downtime when changes are required**
- **Can solve telecommunication room congestion**
- **Provide a low cost alternative for installations that need to be upgraded or reconfigured**
- **Provide a complete end-to-end network solution that integrates the *PANDUIT* wired structured cabling with the Cisco^ wireless network equipment**

PANDUIT zone cabling products are completely modular, accepting all *MINI-COM*® Modules for STP and UTP, fiber optic, and audio/video applications. Zone cabling products accommodate multimedia solutions and can be used in floor, ceiling, and wall mount applications while providing a complete end-to-end network solution. With a zone cabling topology in place, IT managers provide themselves with a scalable physical network infrastructure that meets their needs today as well as the flexibility to deploy the technology of tomorrow.

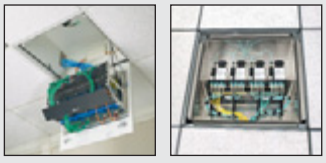
^Cisco is a registered trademark of Cisco Technology, Inc.

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Zone Cabling Systems Roadmap



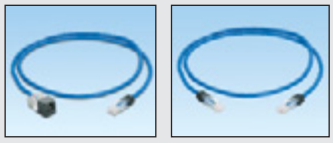
1 *PANZONE*® In-Ceiling/ In-Floor Zone Cabling Boxes (pages B5.3 and B5.7)



2 Consolidation Point Enclosures (pages B5.8 – B5.9)



3 *PANZONE*® Cable Assemblies (page B5.10)



4 *PANZONE*® Enclosure and Wall Mount Cabinet (pages B5.5 – B5.6)



5 *PANZONE*® Wireless Access Point Enclosure (page B6.5)



6 *MINI-COM*® Faceplates (pages B3.3 – B3.20) and Surface Mount Boxes (pages B3.23 – B3.27)



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NEW! PANZONE® In-Ceiling Enclosures

- UL 2043 approved for use in air-handling spaces
- Meet NEC standards
- 40 lb. door weight capacity
- Mount in 2' x 2', 2' x 4', and 2' x 6' drop ceilings
- Designed to accept up to 2 RU of active electronics as deep as 17.5" and up to 3 RU of standard 19" passive connectivity (PZICEA only)
- Thermal management design optimizes air flow for improved heat dissipation; ideal for high heat load PoE enabled switch applications
- AC power ready – receptacle not included (PZICEA only)
- Include doorplate, equipment mounting bracket, integrated horizontal cable slack manager and 40 CFM fan (PZICEA only)
- Optional bracket (PZICBKT) allows zone cabling box to accept all *PANDUIT* standard 19" patch panels (PZICE only)



PZICEA

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
PZICEA	Fully assembled in-ceiling active enclosure. Accepts up to 2 RU of active network equipment and up to 3 RU of passive product. Includes PZICBKT, AC power provisions, and fan kit. External dimensions: 13.50"H x 25.50"W x 27.50"D (342.9mm x 647.7mm x 698.5mm) Internal dimensions: 11.49"H x 22.31"W x 22.46"D (291.8mm x 566.7mm x 570.5mm)	5	1
PZICE	Fully assembled in-ceiling enclosure. Accepts up to six 100-pair punchdown bases. With optional bracket (PZICBKT) accepts up to 5 RU of standard 19" patch panels. External dimensions: 13.50"H x 25.50"W x 27.50"D (342.9mm x 647.7mm x 698.5mm) Internal dimensions: 11.49"H x 22.31"W x 22.46"D (291.8mm x 566.7mm x 570.5mm)	—	1
PZICBKT	In-ceiling bracket is designed to accept up to 5 RU of standard 19" patch panels. Includes integrated horizontal cable slack manager. Mounts inside in-ceiling enclosure (PZICE).	5	1
PZICFK-E	In-ceiling enclosure fan kit power conversion for european regions. Converts fan within in-ceiling active enclosure (PZICEA) to accept 220 VAC/50 Hz power. Includes Shuko plug.	—	1

^One rack space = 1.75" (44.45mm).

PANZONE® In-Ceiling Zone Cabling Boxes

- UL 2043 approved for use in air-handling spaces
- Meet NEC standards
- 25 lb. door weight capacity
- Mount in 2' x 2', 2' x 4', and 2' x 6' drop ceilings
- Designed to accept up to 3 RU of active electronics as deep as 15.5" and up to 6 RU of 19" standard passive connectivity (CICZC2X2A only)
- AC power ready – receptacle not included (CICZC2X2A only)
- Include doorplate, equipment mounting bracket, plenum rated foam kit and 9 CFM fan – fan provides in excess of 100 air changes per hour (CICZC2X2A only)
- Plenum rated foam kit included (CICZC2X2 only)
- Optional bracket (CICZCBRKT) allows zone cabling box to accept all *PANDUIT* standard 19" patch panels (CICZC2X2 only)



CICZC2X2



CICZCBRKT

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
CICZC2X2	Fully assembled in-ceiling zone cabling box. Accepts up to six 100-pair punchdown bases. With optional bracket (CICZCBRKT) accepts up to 9 RU of 19" standard patch panels. Mounts in 2'x2', 2'x4', and 2'x6' ceiling panels. Dimensions: 23.50"L x 23.50"W x 12.13"D (596.90mm x 596.90mm x 308.10mm)	—	1	—
CICZC2X2A	Fully assembled in-ceiling zone cabling box. Mounts in 2'x2', 2'x4', and 2'x6' ceiling panels. Dimensions: 23.50"L x 23.50"W x 12.13"D (596.90mm x 596.90mm x 308.10mm)	9	1	—
CICZCBRKT	In-ceiling zone cabling bracket designed to accept up to 9 RU of 19" standard patch panels and mount inside an in-ceiling zone cabling box (CICZC2X2), sold separately.	9	1	10

^One rack space = 1.75" (44.45mm).

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PANZONE® Wall Mount Cabinets

- Structurally engineered to swing freely even under maximum load capacity
- Thermal management design (vents, perforated doors, and optional fan) optimizes air flow for improved heat dissipation; ideal for high heat load PoE enabled switch applications
- Adjustable rails mount at 1" increments to accommodate various depths of network equipment including PoE switches
- Individual rack spaces are identified for ease of equipment mounting
- Hold 12 RU of active and passive network equipment plus two additional RU for powerstrips and small electronic devices (modems, routers, etc.)
- Working load rating of 250 lbs.



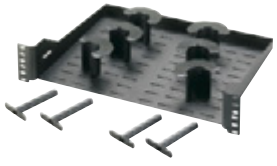
PZC12S



PZC12P



PZC12W



PZCHSM2



PZBR4



PZCGK

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
PANZONE® Wall Mount Cabinets			
PZC12S	Wall mount cabinet with a solid front door; black. Dimensions: 25.81"H x 25.00"W x 22.85"D (655.6mm x 635.0mm x 580.4mm)	12	1
PZC12P	Wall mount cabinet with perforated front door; black. Dimensions: 25.81"H x 25.00"W x 22.85"D (655.6mm x 635.0mm x 580.4mm)	12	1
PZC12W	Wall mount cabinet with windowed front door; black. Dimensions: 25.81"H x 25.00"W x 22.85"D (655.6mm x 635.0mm x 580.4mm)	12	1
PANZONE® Cable Management Options			
PZCHSM2	Wall mount cabinet horizontal slack manager; black. Dimensions: 3.50"H x 19.00"W x 13.00"D (88.9mm x 482.6mm x 330.2mm)	2	2
PZBR3	Cable bend radius post, 3" length.	—	—
PZBR4	Cable bend radius post, 4" length.	—	—
PANZONE® Accessories			
PZCFK	Wall mount cabinet fan kit; kit includes one 115 VAC fan rated at 112 CFM.	—	1
PZCFK-E	Wall mount cabinet fan kit – european version, 220 VAC with Shuko plug.	—	1
PZCFR	Wall mount filter replacement kit.	—	1
STRUCTUREDGROUND™ Grounding Kit			
PZCGK	Grounding and bonding kit; includes all components to properly ground cabinet.	—	1

^One rack space = 1.75" (44.45mm).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PANZONE® CABLEACCESS™ Wall Mount Cabinets

- Innovative cable routing allows easy cable installation into the cabinet without threading cables through an opening
- Multiple access points provide front, both sides, and rear access to the inside of cabinet for cable installation and maintenance
- Optional slack manager allows the standardization of a single patch cord length while keeping the cabinet organized and manageable
- Robust design and locking access doors provide security and protection
- Vented design and optional fan provides thermal management for switches and power supplies
- Structural design minimizes deflection when the full loaded cabinet is opened
- Adjustable rails mount at 1" increments to accommodate various depths of networking equipment
- Individual rack spaces are identified for ease of equipment mounting
- Working load rating 200 lbs.



NC24S

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
PANZONE® CABLEACCESS™ Wall Mount Cabinets				
NC24W	Rotating wall cabinet with window door. Dimensions: 24.25"H x 25.50"W x 25.00"D (615.9mm x 647.7mm x 635.0mm)	12	1	—
NC24S	Rotating wall cabinet with solid door. Dimensions: 24.25"H x 25.50"W x 25.00"D (615.9mm x 647.7mm x 635.0mm)	12	1	—
PANZONE® CABLEACCESS™ Cable Management Options				
NCSM12	Vertical slack manager for cabinet.	12	1	—
HS4X4BL6	6' transition 4"x4" duct; solid wall.	—	6	60
HC4BL6	Covers duct to protect wires, improve aesthetics and provides greater wire capacity.	—	6	60
PANZONE® CABLEACCESS™ Accessories				
NCFK	Fan kit; use NCFK for heat loads between 150 W to 500 W at ambient temperature of 72°F.	—	1	—
NCFK-E	Wall mount cabinet fan kit – european version, 220 VAC with Shuko plug.	—	1	—
NCGK	Ground kit complies with GR-1089 grounding and bonding specifications.	—	1	10

^One rack space = 1.75" (44.45mm).
All product color is black.

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PANZONE® Active Wall Mount Enclosure

- Provides optimal cable management by allowing adequate space to route and manage patch cords
- Patch panel bracket rotates 90° and accepts 19" rack mountable product allowing easy installation
- Holds up to 3 RU of passive product and up to 3 RU of active equipment
- Provides multiple cable entry/exit points via knockouts
- Design accepts all *PANDUIT* flat patch panels
- Knockouts on all sides accommodate *PANDUIT* T-70 raceway
- Door can be assembled to hinge on either the right or left side providing flexibility and easy access for any mounting location
- Front cover has standard padlock feature; optional keyed locks available
- Vented design and optional fan provides thermal management for switches and power supplies



PZAEWM3

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
PANZONE® Active Wall Mount Enclosure				
PZAEWM3	Active wall mount enclosure includes mounting template for quick installation. Dimensions: 38.50"H x 27.92"W x 8.61"D (977.9mm x 709.2mm x 218.7mm)	6	1	—
PANZONE® Air Exchange Fan				
PZAEFAN	Wall mount enclosure fan kit. Kit includes one 115 VAC fan rated at 112 CFM. Enclosure accepts up to two fan kits.	—	1	—
PZAEFK-E	Wall mount enclosure fan kit – european version, 220 VAC with Shuko plug. Fan rated at 112 CFM. Enclosure accepts up to two fan kits.	—	1	—
PANZONE® Accessories				
PZAELOCK	Optional keyed lock set; includes two locks with keys.	—	1	10
STRUCTUREDGROUND™ Grounding Kit				
PZAEGK	One tin-plated copper bracket; 3.92"L x .56"W x .79"H (99.6mm x 14.2mm x 20.1mm); provided with four #12-24 screws, one each #10-32 and #10-24 hex nut, #10 split lock washer, grounding washer and ESD protection sticker.	—	1	—

All product color is gray.
^One rack space = 1.75" (44.45mm).

NEW! PANZONE® Building Automation Systems Enclosure

- Integrates data communications and Building Automation Systems (BAS) by converging the infrastructure into a single ethernet network
- Minimizes installation costs by consolidating BAS equipment into a single enclosure
- Eliminates redundant cable runs
- Provides optimal cable routing and management of patch cords and electrical components
- Vented design and optional fan provides thermal management for network equipment and power supplies



Part Number	Part Description	No. of Rack Spaces^	Color	Std. Pkg. Qty.
PZBASE3	Building automation systems enclosure. Includes perforated panel 32.00"H x 22.50"W (812.8mm x 571.5mm) for mounting BAS devices. Dimensions: 48.50"H x 35.00"W x 8.60"D (1231.9mm x 889.0mm x 218.4mm)	3	White	1
PZBASELK	Optional keyed lock set; includes two locks with keys.	—	—	1

^One rack space = 1.75" (44.45mm).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PANZONE® In-Floor Zone Cabling Boxes

- Accept all standard 19" patch panels
- UL 2043 approved for use in air-handling spaces
- Work with standard 24"x24" raised floor panels
- Plenum rated foam kit and mounting brackets included



CIFZC8

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
CIFZC4	Fully assembled in-floor zone cabling box requires 6" minimum access floor depth; clear finish. Dimensions: 24.00"L x 24.00"W x 4.77"D (609.6mm x 609.6mm x 121.2mm)	4	1
CIFZC8	Fully assembled in-floor zone cabling box requires 8" minimum access floor depth; clear finish. Dimensions: 24.00"L x 24.00"W x 6.45"D (609.6mm x 609.6mm x 163.8mm)	8	1
CIFZC11	Fully assembled in-floor zone cabling box requires 14" minimum access floor depth; clear finish. Dimensions: 24.00"L x 24.00"W x 12.51"D (609.6mm x 609.6mm x 317.8mm)	11	1
CIFZC4F	Fully assembled in-floor zone cabling fiber box requires 8" minimum access floor depth; clear finish. Compatible with OPTICOM® QUICKNET™ Pre-Terminated MTP* cassettes. Dimensions: 24.00"L x 24.00"W x 8.50"D (609.6mm x 609.6mm x 215.9mm)	4	1
CIFZC6F	Fully assembled in-floor zone cabling fiber box requires 14" minimum access floor depth; clear finish. Compatible with OPTICOM® QUICKNET™ Pre-Terminated MTP* cassettes. Dimensions: 24.00"L x 24.00"W x 12.50"D (609.6mm x 609.6mm 317.5mm)	6	1

^One rack space = 1.75" (44.45mm).
*MTP is a registered trademark of US Connec Ltd.

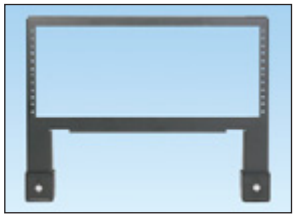
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NEW! PANZONE® Underfloor/Overhead Enclosures

- Ideal solutions for raised floor and mounting overhead in data centers and telecommunication rooms
- UL 2043 approved for use in air-handling spaces (PZCPE*F only)
- Accept OPTICOM® Fiber Adapter Panels (FAPs) or QUICKNET™ Pre-Terminated MTP* Cassettes (PZCPE*F only)
- Capable of mounting above or below most manufacturers' ladder rack (PZLRB* only)



PZCPE4F



PZLRB4

Part Number	Part Description	No. of Adapter Panels	Std. Pkg. Qty.
PANZONE® Underfloor Enclosures			
PZCPE2F	Consolidation point enclosure accepts up to two fiber adapter panels (FAPs) or two QUICKNET™ Pre-Terminated MTP* Cassettes. Includes hardware to mount enclosure to wire cable tray. Dimensions: 13.91"H x 12.19"W x 2.00"D (353.2mm x 309.6mm x 50.8mm)	2	1
PZCPE4F	Consolidation point enclosure accepts up to four fiber adapter panels (FAPs) or four QUICKNET™ Pre-Terminated MTP* Cassettes. Includes hardware to mount enclosure to wire cable tray. Dimensions: 13.91"H x 12.19"W x 3.54"D (353.2mm x 309.6mm x 89.8mm)	4	1
PZCPE8F	Consolidation point enclosure accepts up to eight fiber adapter panels (FAPs) or eight QUICKNET™ Pre-Terminated MTP* Cassettes. Includes hardware to mount enclosure to wire cable tray. Dimensions: 13.91"H x 21.00"W x 3.54"D (525.5mm x 309.6mm x 89.8mm)	8	1
PANZONE® Overhead Enclosures			
PZLRB2	2 RU ladder rack bracket attaches directly to most ladder racks. Dimensions: 10.64"H x 19.27"W x 2.00"D (270.3mm x 489.5mm x 50.8mm)	—	1
PZLRB3	3 RU ladder rack bracket attaches directly to most ladder racks. Dimensions: 12.39"H x 19.27"W x 2.00"D (314.7mm x 489.5mm x 50.8mm)	—	1
PZLRB4	4 RU ladder rack bracket attaches directly to most ladder racks. Dimensions: 14.14"H x 19.27"W x 2.00"D (359.2mm x 489.5mm x 50.8mm)	—	1

One rack space = 1.75" (44.45mm).
All product color is black.
*MTP is a registered trademark of US Conec Ltd.

Consolidation Point Boxes

UL LISTED

- Suitable for wall mount and underfloor applications
- UL 2043 approved for use in air-handling spaces for copper applications
- Accept MINI-COM® Modules for STP and UTP, fiber optic, and audio/video, which snap in and out for easy moves, adds, and changes
- Supplied with cable management accessories
- Optional fiber conversion kit available



CUFMB24BL



CUFB48BL

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
CUFMB24BL	24-port aluminum underfloor consolidation point box includes pre-printed numbered labels with writable surface on back when pre-numbered labels are not applicable. Dimensions: 1.69"H x 10.85"W x 10.67"L (42.9mm x 275.6mm x 271.0mm)	1	—
CUFB48BL	48-port underfloor consolidation point box made of 16 gauge rugged steel for long term durability. Dimensions: 1.63"H x 10.00"W x 14.88"L (41.4mm x 254.0mm x 378.0mm)	1	—
CUFF-KIT	Optional fiber conversion kit to be used with CUFB48BL and CUFMB24BL. Kit includes: four PANDUIT® PAN-TY® Cable Ties, four wire saddles, two adhesive fiber spools, two support brackets to hold fiber cable, one grounding lug, one laser warning label, one fiber warning label and two rubber grommets.	1	10

All product color is black.

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Punchdown Consolidation Point Enclosures

- Include *TAK-TY*® Hook & Loop Cable Ties, grommets, and a choice of punchdown bases
- UL 2043 approved for use in air-handling spaces
- Follow TIA/EIA-568-B standard
- Mount to wall above and below ceiling



WMCPESGBL

Part Number	Part Description	Std. Pkg. Qty.
WMCPESGBL	Fully assembled aluminum enclosure, which includes 24-port/4-pair standard density *GP6™ PLUS* Category 6 base and *TAK-TY*® Hook & Loop Cable Ties. Dimensions: 3.44"H x 9.47"W x 13.22"L (87.4mm x 240.5mm x 335.8mm)	1
WMCPEPPBL	Fully assembled aluminum enclosure, which includes 110-pair *PAN-PUNCH*® Base and *TAK-TY*® Hook & Loop Cable Ties. Dimensions: 3.44"H x 9.47"W x 13.22"L (87.4mm x 240.5mm x 335.8mm)	1
WMCPEBL	Aluminum enclosure with *TAK-TY*® Hook & Loop Cable Ties. Dimensions: 3.44"H x 9.47"W x 13.22"L (87.4mm x 240.5mm x 335.8mm)	1

All product color is black.

PANZONE® Wall Mount Consolidation Point Enclosures

- Can be directly mounted to a wall or recessed into a wall
- Include grommet edging, labels, and *TAK-TY*® Hook & Loop Cable Ties
- Accommodate up to four 100-pair punchdown bases or optional patch panel bracket (PZBPPB) can be used to accommodate up to 2 RU of standard 19" patch panels
- Conduit knockouts of 1 3/4" – 2" are available on top and bottom; conduit knockouts of 1 1/2" are available on the sides
- Option of flat cover or hinged lockable door (each sold separately)



PZB4



PZB4-HC



PZB4-FC



PZBPPB

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
***PANZONE*® Wall Mount Consolidation Point Enclosure**			
PZB4	Enclosure, door not included; select PZB4-HC or PZB4FC. Dimensions: 25.00"H x 14.50"W x 4.65"D (635.0mm x 368.3mm x 118.1mm)	1	—
PZB4-HC	Hinged door to be used with *PANZONE*® Enclosure (PZB4) when recessed in a wall. Reversible door can hinge from either side and includes lock with tab release.	1	—
PZB4-FC	Flat cover to be used with *PANZONE*® Enclosure (PZB4) when mounting to wall.	1	—
***PANZONE*® Enclosure Bracket**			
PZBPPB	Patch panel bracket accommodates up to 2 RU of standard 19" patch panels. Includes one pair of brackets.	1	10

One rack space = 1.75" (44.45mm).
All product color is off white.

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PANZONE® Cable Assemblies

- PANZONE® Category 6 and Category 6A Cable Assemblies for use in zone cabling applications
- Available in plug to jack module and plug to plug configurations
- Available in plenum or riser
- T568B wired



UJPBU



UPBU

Part Number	Part Description	Length (Ft.)	Cable Type	Cable Color	Std. Pkg. Qty.
Plug to Plug Cable Assemblies					
Category 6A Shielded					
SAPPBU25	Category 6A FTP solid plenum cable with *TX6™ PLUS* Modular Plugs on each end.	25	Plenum	Blue	1
SAPRBU25	Category 6A FTP solid riser cable with *TX6™ PLUS* Modular Plugs on each end.	25	Riser	Blue	1
Category 6A UTP					
UAPPBU25	Category 6A UTP solid plenum cable with *TX6™ PLUS* Modular Plugs on each end.	25	Plenum	Blue	1
UAPRBU25	Category 6A UTP solid riser cable with *TX6™ PLUS* Modular Plugs on each end.	25	Riser	Blue	1
Category 6 UTP					
UPPBU25Y	6 UTP solid plenum cable with *TX6™ PLUS* Modular Plugs on each end.	25	Plenum	Blue	1
UPBU25Y	Category 6 UTP solid riser cable with *TX6™* PLUS Modular Plugs on each end.	25	Riser	Blue	1
Plug to Jack Module Cable Assemblies					
Category 6A Shielded					
SAJPBU25BL	Category 6A FTP solid plenum cable with a *TX6™ PLUS* Modular Plug on one end and a black *MINI-COM® TX6™ PLUS* Jack Module on the other.	25	Plenum	Blue	1
SAJRBU25BL	Category 6A FTP solid riser cable with a *TX6™ PLUS* Modular Plug on one end and a black *MINI-COM® TX6™ PLUS* Jack Module on the other.	25	Riser	Blue	1
Category 6A UTP					
UAJPBU25BL	Category 6A UTP solid plenum cable with a *TX6™ PLUS* Modular Plug on one end and a black *MINI-COM® TX6™ PLUS* Jack Module on the other.	25	Plenum	Blue	1
UAJRBU25BL	Category 6A UTP solid riser cable with a *TX6™ PLUS* Modular Plug on one end and a black *MINI-COM® TX6™ PLUS* Jack Module on the other.	25	Riser	Blue	1
Category 6 UTP					
UJBU25BLY	Category 6 UTP solid riser cable with a *TX6™ PLUS* Modular Plug on one end and a black *MINI-COM® TX6™ PLUS* Jack Module on the other.	25	Riser	Blue	1
UJPBU25BLY	Category 6 UTP solid plenum cable with a *TX6™ PLUS* Modular Plug on one end and a black *MINI-COM® TX6™ PLUS* Jack Module on the other.	25	Plenum	Blue	1

For lengths 10' to 100' (5' increments) and 110', 120', 130', 140', 150' change the length designation in the part number to the desired length. For example, the part number for a 100', plug to plug, Category 6A, shielded, riser cable assembly is SAPRBU100.

Cable Labels for PANZONE® Cable Assemblies



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Cable Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER™* LS8E Hand-Held Printer Label**	***COUGAR™* LS9 Hand-Held Printer Label**
All *PAN-ZONE®* Cable Assemblies	**S100X150YAJ**	**S100X150VATY**	**S100X150VAC**	**T100X000CBC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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WIRELESS SOLUTIONS

PANDUIT and Cisco Systems (through the Cisco^ Unified Wireless Network) have teamed up to deliver the *WIRELESS CONNECTION*™ Solution. This solution cost-effectively addresses wireless deployment, security management, and control issues facing enterprises by bringing together wired and wireless networks to enable application interoperability. *PANDUIT* offers a range of Cisco enterprise-class autonomous (distributed) and light-weight (centralized) access points and wireless bridges designed to fit the needs of a variety of applications. Complementing the Cisco^ Unified Wireless Network is the *PANDUIT* cabling infrastructure solution which when combined, provide a reliable platform that guards against threats to the wireless local area network (WLAN) and provides physical protection for critical network elements.



- ***WIRELESS CONNECTION***™ **Solution ensures full wired and wireless compatibility and interoperability**
- **Provides integrated wired and wireless solution for lower total cost of ownership (TCO)**
- **Cost-effectively addresses WLAN security, deployment, and management issues**
- **Offers unequalled choice for WLAN deployment in distributed or centralized architectures**
- **Fully standards compliant IEEE 802.11 a/b/g solutions; compliant to IEEE 802.11i authentication and encryption standards**

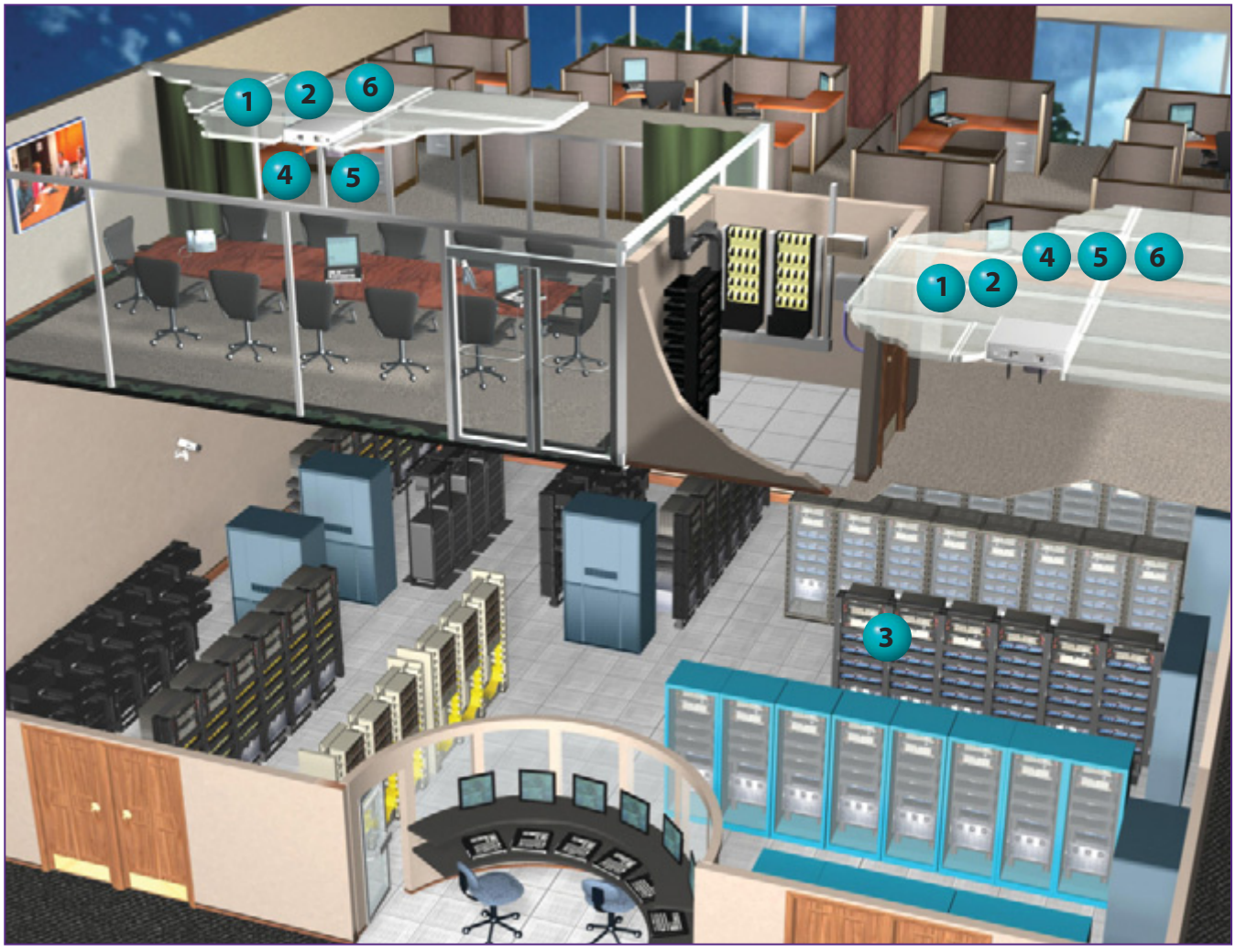
The *WIRELESS CONNECTION*™ Solution features *PANDUIT*® *PANZONE*® Wireless Access Point Enclosures and Cisco Aironet^ access points, centralized WLAN controllers, antennas and accessories. The *PANZONE*® Wireless Access Point Enclosures accommodate a full range of Cisco access points including Cisco^ 1000 series centralized access points, Cisco^ 1130, 1230 and 1240 series access points capable of configuration in distributed or centralized architectures, and selected 1300 series outdoor access points. Designed to support a secure wired and wireless environment, the *PANDUIT* cabling infrastructure also includes copper and fiber cabling systems and Power over Ethernet patch panels (see sections C1, C2 and D).

^Cisco Systems and Aironet are registered trademarks of Cisco Technology, Inc.

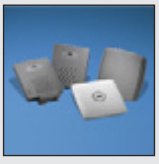
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A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

Wireless Solutions Roadmap



1 **Distributed Access Points (page B6.3)**



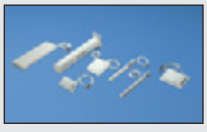
2 **Centralized Access Points (page B6.4)**



3 **Wireless LAN Controllers (page B6.7)**



4 **Wireless Antennas – External (page B6.7)**



5 **Wireless Accessories (page B6.8)**



6 **Wireless Access Point Enclosures (page B6.5)**



Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Distributed Access Points

- Extend network coverage, even to the most challenging environments
- Provide secure network access
- Standards compliant access technology, IEEE 802.11 a/b/g
- Ensure robust network performance and interoperability with the wired local area network (LAN)
- Optional SMARTnet^ warranty available



Part Number	Part Description	Std. Pkg. Qty.
P-AP1131AG-A-K9	Cisco Aironet^ 1130 Series 802.11a/g Access Point with Internal Antennas, FCC configuration. For use with *PANDUIT* enclosure PZWIFIEW.	1
P-AP1131AG-N-K9	Cisco Aironet^ 1130 Series 802.11a/g Access Point with Internal Antennas, North America configuration (excluding FCC). For use with *PANDUIT* enclosure PZWIFIEW.	1
P-AP1231G-A-K9	Cisco Aironet^ 1200 Series 802.11g Modular IOS Access Point, RP-TNC connectors for required External Antenna. Available Card BUS slot, FCC configuration. For use with *PANDUIT* enclosure PZWIFIE.	1
P-AP1232AG-A-K9	Cisco Aironet^ 1230 Series 802.11a/g Modular IOS Access Point, RP-TNC connectors for required External Antennas, FCC configuration. For use with *PANDUIT* enclosure PZWIFIED.	1
P-AP1232AG-N-K9	Cisco Aironet^ 1230 Series 802.11a/g Modular IOS Access Point, RP-TNC connectors for required External Antennas, North America configuration (excluding FCC). For use with *PANDUIT* enclosure PZWIFIED.	1
P-AP1242AG-A-K9	Cisco Aironet^ 1240 Series 802.11a/g non-modular IOS Access Point, RP-TNC connectors for required External Antennas, FCC configuration. For use with *PANDUIT* enclosure PZWIFIED.	1
P-BR1310G-A-K9	Cisco Aironet^ 1300 Series 802.11g Outdoor Access Point / Bridge with IOS Software and Internal Antennas, FCC configuration.	1
P-BR1310G-A-K9R	Cisco Aironet^ 1300 Series 802.11g Outdoor Access Point / Bridge with IOS Software and RP-TNC connectors for required External Antennas, FCC configuration.	1

Available as part of an integrated wired and wireless solution.
^Cisco, SMARTnet, and Aironet are registered trademarks of Cisco Technology, Inc.
*Contact Service and Technical Support if radio upgrades are considered.

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C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

Centralized Access Points (LWAPP-Enabled)

- Enable centralized WLAN deployments, IEEE 802.11 a/b/g
- Offer compatibility and security with the wired network
- Used with Cisco^ Centralized Series 2000, 4100, and 4400 controllers
- Provide a scalable and integrated WLAN solution
- Easy to install and manage
- Optional SMARTnet^ warranty available



Part Number	Part Description	Std. Pkg. Qty.
P-AP1010-A-K9	Cisco Aironet^ 1000 Series 802.11a/b/g Access Point with Internal Antennas, FCC. For use with *PANDUIT* enclosure PZWIFIELW.	1
P-AP1020-A-K9	Cisco Aironet^ 1000 Series 802.11a/b/g Access Point with Internal Antennas and RP-TNC connectors for optional External Antenna(s), FCC. For use with *PANDUIT* enclosure PZWIFIELW.	1
P-AP1030-A-K9	Cisco Aironet^ 1000 Series 802.11a/b/g Remote Edge Access Point with Internal Antennas and RP-TNC connectors for optional External Antenna(s), FCC. For use with *PANDUIT* enclosure PZWIFIELW.	1
P-LP1131AG-A-K9	Cisco Aironet^ 1130 Series 802.11a/g non-modular LWAPP Access Point, Internal Antennas, FCC configuration. For use with *PANDUIT* enclosure PZWIFIEW.	1
P-LP1131AG-N-K9	Cisco Aironet^ 1130 Series 802.11a/g non-modular LWAPP Access Point, Internal Antennas, North America configuration (excluding FCC). For use with *PANDUIT* enclosure PZWIFIEW.	1
P-LP1232AG-A-K9	Cisco Aironet^ 1230 Series 802.11a/g modular LWAPP Access Point, RP-TNC connectors, FCC configuration. For use with *PANDUIT* enclosure PZWIFIED.	1
P-LP1232AG-N-K9	Cisco Aironet^ 1230 Series 802.11a/g modular LWAPP Access Point, RP-TNC connectors, North America configuration (excluding FCC). For use with *PANDUIT* enclosure PZWIFIED.	1
P-LP1242AG-A-K9	Cisco Aironet^1240 Series 802.11a/g non-modular LWAPP Access Point, RP-TNC connectors. FCC configuration. For use with *PANDUIT* enclosure PZWIFIED.	1

Available as part of an integrated wired and wireless solution.

^Cisco, SMARTnet, and Aironet are registered trademarks of Cisco Technology, Inc.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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PANZONE® Wireless Access Point Enclosures

- Enclosures specifically designed for use with Cisco Aironet^ 1000, 1130 and 1200 Series Wireless Access Points
- Enclosures specifically designed for use with HP ProCurve 420*, Foundry IP200‡ and Enterasys^^, RBT-4102 Wireless Access Points
- Lockable enclosure protects against tampering and theft
- Knockouts allow multiple antenna configurations
- Connectivity accessory kit (included) provides 2-position surface mount box, *MINI-COM® TX6™ PLUS* Jack Module, *TX6™ PLUS* Patch Cord and grounding cable
- Optional ceiling bracket kit allows WAP to be mounted in-ceiling for design flexibility for optimum wireless coverage
- 2' x 2' ceiling bracket eliminates cutting the ceiling tile by replacing a standard 2' x 2' ceiling tile


PZWIFIE


PZWIFIED


PZWIFIEW


PZWIFIELW


PZWIFIDCB

Part Number	Part Description	Color	Std. Pkg. Qty.
Wireless Enclosures Designed for Use with Cisco Aironet^ Series Wireless Access Points			
PZWIFIE	*PANZONE®* Wireless Access Point Enclosure; accommodates Cisco Aironet^ 1200 Series Wireless Access Points except for 1232 and 1242 models. UL 2043 rated. Dimensions: 12.00"H x 12.00"W x 2.31"D (304.8mm x 304.8mm x 58.7mm).	White	1
PZWIFIED	*PANZONE®* Wireless Access Point Enclosure; accommodates Cisco Aironet^ 1232 and 1242 Wireless Access Points. UL 2043 rated. Dimensions: 13.75"H x 12.00"W x 3.06"D (349.8mm x 304.8mm x 77.7mm).	White	1
PZWIFIEA	*PANZONE®* Wireless Access Point Enclosuree; compatible with all Cisco Aironet^ 1200 Series WAPs when used with Cisco^ Patch Antennas (AIR-ANT5145V-R and/or AIR-ANT5959). UL 2043 rated. Dimensions: 13.75"H x 12.00"W x 3.06"D (349.8mm x 304.8mm x 77.7mm)	White	1
PZWIFIEW	*PANZONE®* Wireless Access Point Enclosure with windowed front door, accommodates Cisco Aironet^ 1000 Series Wireless Access Points. Dimensions: 12.00"H x 12.00" x 2.31"D (304.8mm x 304.8mm x 58.7mm)	White	1
PZWIFIELW	*PANZONE®* Wireless Access Point Enclosure with windowed front door, accommodates Cisco Aironet^ 1000 Series Wireless Access Points. Dimensions: 12.00"H x 12.00" x 2.31"D (304.8mm x 304.8mm x 58.7mm)	White	1
Wireless Enclosure Designed for HP*, Foundry Networks‡ and Enterasys Networks^^ Wireless Access Points			
PZWIFIEH	*PANZONE®* Wireless Access Point Enclosure Point Enclosure; accommodates HP ProCurve* 420, Foundry‡ IP200, and Enterasys^^ RBT-4102 Wireless Access Points. UL 2043 rated. Dimensions: 13.75"H x 12.00"W x 3.06"D (349.8mm x 304.8mm x 77.7mm)	White	1
In-Ceiling Mounting Bracket Kits			
PZWIFICB	*PANZONE®* Wireless Access Point Enclosure In-Ceiling Mounting Bracket Kit for PZWIFIE, PZWIFIEW, PZWIFIELW. Dimensions: 3.31"H x 13.62"W x .75"D (84.1mm x 345.9mm x 19.0mm)	White	1
PZWIFIDCB	*PANZONE®* Wireless Access Point Enclosure In-Ceiling Mounting Bracket Kit for PZWIFIED, PZWIFIEA and PZWIFIEH. Dimensions: 4.06"H x 13.73"W x .81"D (103.1mm x 348.7mm x 20.6mm)	White	1
PZW2X2CB	*PANZONE®* Wireless Access Point Enclosure 2'x2'. In-Ceiling Mounting Bracket Kit for PZWIFIE, PZWIFIEW, PZWIFIELW. Dimensions: 3.19"H x 23.75"W x 23.75"D (81.1mm x 603.3mm x 603.3mm)	White	1
PZW2X2DCB	*PANZONE®* Wireless Access Point Enclosuree 2'x2'. In-Ceiling Mounting Bracket Kit for PZWIFIED, PZWIFIEA and PZWIFIEH. Dimensions: 3.94"H x 23.75"W x 23.75"D (100.1mm x 603.3mm x 603.3mm)	White	1

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*ProCurve is a registered trademark of Hewlett-Packard Development Company, L.P.
‡Foundry is a registered trademark of Foundry Networks, Inc.
^^Enterasys is a registered trademark of Enterasys Networks, Inc.
For shielded versions of *PANZONE®* Wireless Access Point Enclosures, add suffix "S" to part number.

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NEW! PANZONE® NEMA 4X/IP66 Rated Wireless Access Point Enclosures

- NEMA 4X and IP66 rating protects against corrosion, windblown dust and rain, splashing water and hose-directed water
- Universal design accommodates the most popular Wireless Access Points including Cisco Aironet^ 1200 and 1300 Series
- Fiberglass construction and aluminum mounting plate allows quick and easy access point installation
- UL 508A Listed and approved
- Includes pre-configured mounting template
- Provisions for pad locks to protect against tampering and theft
- Optional NEMA 4X rated fittings available in various sizes
- Optional NEMA 4X drain and vent kit
- Connectivity accessory kit (included): 2-position outlet box, *MINI-COM® TX6™ PLUS* Jack Module, *TX6™ PLUS* Patch Cord, silicone sealant and grounding cable
- Shielded connectivity accessory kit also available



PZNWE12



PZNWE14

Part Number	Part Description	Std. Pkg. Qty.
PANZONE® NEMA 4X/IP66 Rated Wireless Access Point Enclosures		
PZNWE12	Wireless enclosure designed for Power over Ethernet applications. Includes UTP connectivity kit. External dimensions: 13.56"H x 13.47"W x 6.56"D (344.4mm x 342.1mm x 166.6mm) Internal dimensions: 11.70"H x 11.70"W x 6.29"D (297.2mm x 297.2mm x 159.8mm)	1
PZNWE12S	Wireless enclosure designed for Power over Ethernet applications. Includes shielded connectivity kit. External dimensions: 13.56"H x 13.47"W x 6.56"D (344.4mm x 342.1mm x 166.6mm) Internal dimensions: 11.70"H x 11.70"W x 6.29"D (297.2mm x 297.2mm x 159.8mm)	1
PZNWE14	Wireless enclosure designed for traditional AC power applications. Includes UTP connectivity kit. External dimensions: 15.50"H x 13.50"W x 6.25"D (393.7mm x 342.9mm x 158.8mm) Internal dimensions: 13.53"H x 11.55"W x 5.94"D (343.7mm x 293.4mm x 150.9mm)	1
PZNWE14S	Wireless enclosure designed for traditional AC power spplications. Includes shielded connectivity kit. External dimensions: 15.50"H x 13.50"W x 6.25"D (393.7mm x 342.9mm x 158.8mm) Internal dimensions: 13.53"H x 11.55"W x 5.94"D (343.7mm x 293.4mm x 150.9mm)	1
NEMA 4X Rated Fittings and Accessories		
PZNF1	NEMA 4X rated compression fitting, ideal for cable diameters of .115" to .250" (2.82mm to 6.35mm).	1
PZNF2	NEMA 4X rated compression fitting, ideal for cable diameters of .230" to .395" (5.84mm to 10.03mm).	1
PZNF3	NEMA 4X rated compression fitting, ideal for cable diameters of .170" to .450" (4.32mm to 11.43).	1
PZNDVK	NEMA 4X drain and vent kit.	1

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Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Centralized Wireless Controllers

- Used in conjunction with Cisco^ LWAPP Enabled Centralized Access Points
- Multilayered security features
- Zero-configuration deployment
- Intelligent RF management
- Includes 8 x 5 SMARTnet^ warranty; upgrades available



Part Number	Part Description	Std. Pkg. Qty.
P-WLC2106-K9	Cisco^ 2000 Series WLAN Controller, supports up to six LWAPP-Enabled Centralized Access Points.	1
P-WC4402-12-K9	Cisco^ 4400 Series WLAN Controller, supports up to twelve LWAPP-Enabled Centralized Access Points.	1
P-WC4402-25-K9	Cisco^ 4400 Series WLAN Controller, supports up to 25 LWAPP-Enabled Centralized Access Points.	1
P-WC4402-50-K9	Cisco^ 4400 Series WLAN Controller, supports up to 50 LWAPP-Enabled Centralized Access Points.	1
P-WC4404-100-K9	Cisco^ 4400 Series WLAN Controller, supports up to 100 LWAPP-Enabled Centralized Access Points.	1

Available as part of an integrated wired and wireless solution.
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External Antennas

- Further extend network coverage in areas that may obstruct signal quality
- Permit flexible and scalable wireless configurations
- Facilitate lower total cost of network



Part Number	Part Description	Std. Pkg. Qty.
P-ANT1728	Cisco Aironet^ High Gain Omni-Directional Indoor Medium Range Ceiling Mount Antenna.	1
P-ANT1949	Cisco Aironet^ Yagi Mast Mount 13.5dBi Outdoor Medium Range Directional Antenna.	1
P-ANT2012	Cisco Aironet^ Diversity Patch 6.5dBi In/Outdoor Medium Range Wall Mount Antenna with two radiating elements, cable length 3'	1
P-ANT2410Y-R	Cisco Aironet^ Yagi Mast Mount 10dBi Directional Antenna.	1
P-ANT2506	Cisco Aironet^ 5.2dBi Omni-Directional Outdoor Short Range Mast Mount Antenna.	1
P-ANT3213	Cisco Aironet^ Diversity Omni 5.2dBi Indoor Medium Range Pillar Mount Antenna.	1
P-ANT4941	Cisco Aironet^ 2.2 dBi Dipole 2.4 GHz Antenna (standard rubber duck antenna), 4".	1
P-ANT5135D-R	Cisco Aironet^ 3.5dBi Dipole 5 GHz Antenna (standard rubber duck antenna), 4".	1
P-ANT5145V-R	Cisco Aironet^ Patch 4.5dBi Indoor Mid Range 5 GHz antenna with two radiating elements.	1
P-ANT5160V-R	Cisco Aironet^ 6dBi Omni-Directional In/Outdoor 5 GHz Antenna.	1
P-ANT5959	Cisco Aironet^ Patch 2dBi Indoor Antenna with two radiating elements.	1

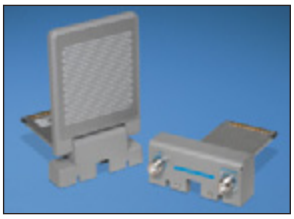
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A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

Wireless Accessories

- Full range of products to complete a WLAN installation
- WLAN compatible components ensure successful start up and operation
- Provide flexibility to meet customized configurations



Part Number	Part Description	Std. Pkg. Qty.
Radio Upgrades		
P-MP21G-A-K9	Cisco^ expansion module, Mini-PCI radio upgrade module 802.11g for Aironet^ 1100 and 1200 Series Access Point.	1
P-RM21A-A-K9	Cisco^ 802.11a radio upgrade module, cardbus for Aironet^ 1200 Series Access Point with articulating antenna paddle.	1
P-RM22A-A-K9	Cisco^ 802.11a radio upgrade module, cardbus for Aironet^ 1200 Series Access Point with two RP-TNC connectors.	1
Power Injectors		
P-PWR-1000	Power Supply for Cisco Aironet^ 1000 Series Access Point.	1
P-PWRINJ-1000AF	802.3af Power injector for Cisco Aironet^ 1000 Series Centralized Access Points.	1
P-PWRINJ3	Cisco Aironet^ Power Injector (external), 48 V, 15 W.	1
Cable Accessories		
P-ACC2537-060	Cisco Aironet^ 60" bulkhead extender; flexible antenna cable for use within an enclosure.	1
P-CONCAB1200	Aux console port cable.	1
Grounding Accessories		
P-ACC245LA-R	2.4 GHz and 5 GHz lightning arrestor with RP-TNC connector.	1
Mounting Kits		
P-ACC-CEBZL1000	Cisco Aironet^ 1000 Series ceiling-mount bezel kit.	1
P-ACC-WBRKT1000	Cisco Aironet^ 1000 Series wall-mount bracket kit.	1
P-ACCRMK1300	Roof mount kit for Cisco Aironet^ 1300 Series Outdoor Access Point/Bridge; multifunction roof or wall mount, mounting hardware, 20' and 50' dual RG-6 cable assembly with F-type connectors, Aironet^ grounding block, grounding lug, coaxial sealant and anticorrosion gel.	1
P-ACCWAMK1300	Cisco Aironet^ 1300 Series wall-mount bracket kit.	1

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COPPER PATCH PANELS, CORDS, AND PUNCHDOWNS

PANDUIT offers end-to-end solutions for all twisted pair copper cabling applications. Systems are designed to exceed the latest industry standards, providing assurance of network reliability. *PANDUIT* solutions support emerging technologies, including 10 GbE, Power over Ethernet, and Voice over IP. *PANDUIT*® *MINI-COM*® Modular Patch Panels accept *MINI-COM*® Modules for copper, fiber, and audio/video to provide modular solutions for intermediate to high density installations.

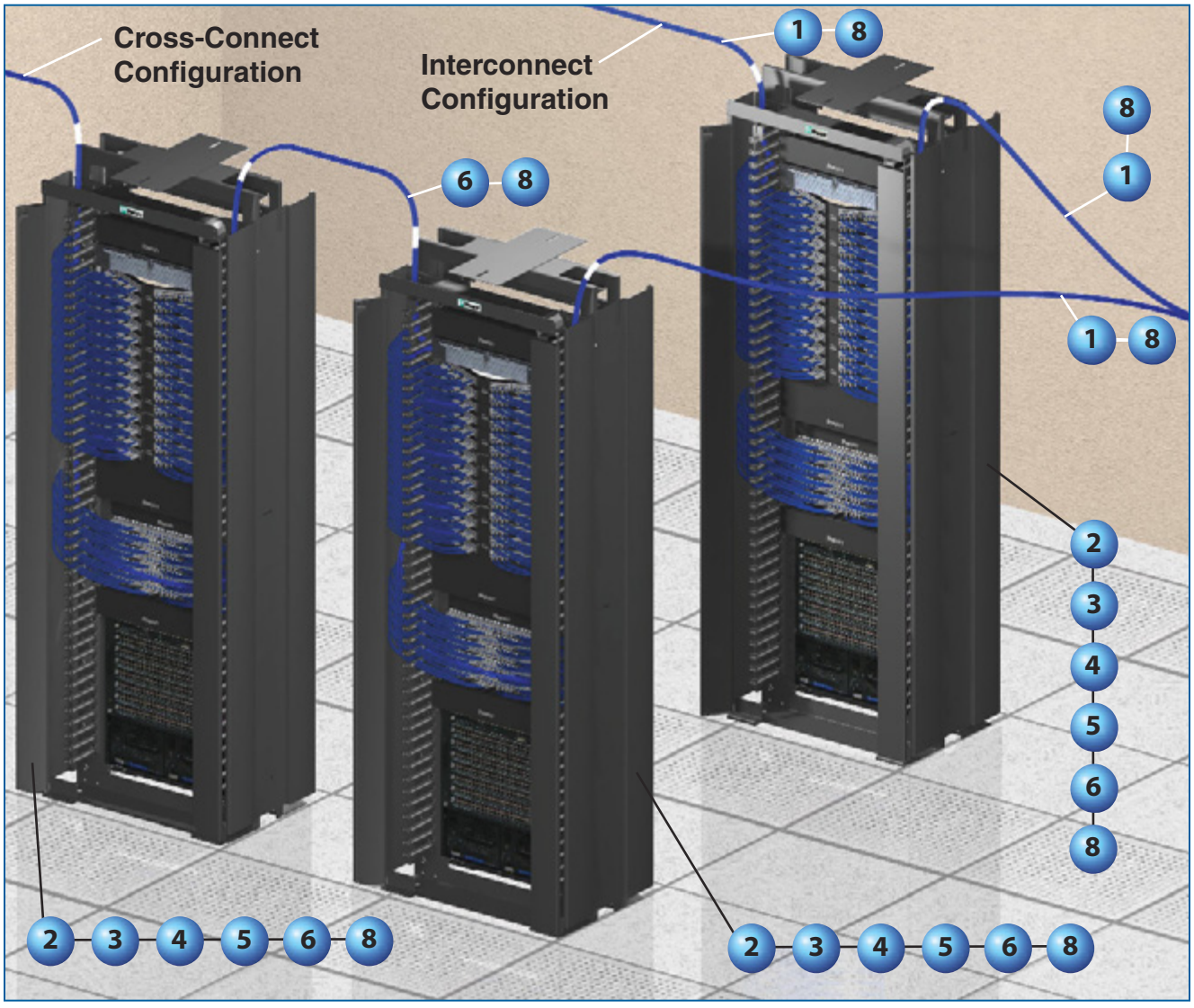


- **Pre-terminated solutions can be installed in 75% less time than field-terminated installations**
- **Patented angled and high density designs conserve valuable rack space**
- **Modularity provides design flexibility for scalability and maintenance**
- **Backwards compatibility to support existing infrastructure**
- **End-to-end solutions support worldwide applications including UTP, STP, fiber optic and audio/video**
- ***ULTIMATE ID*® components are part of a complete system for identification designed to efficiently support TIA/EIA-606-A standard labeling requirements**

The *QUICKNET*™ Copper Cabling System is a custom pre-terminated solution, designed to meet unique cabling requirements. Fast and simple to install, this high density solution provides consistent network reliability and reduces on-site rework. The *TX* Copper Cabling Systems are available in Category 6A, Category 6, and Category 5e performance levels and include STP and UTP copper cable, jack modules, patch cords and patch panels. *PANDUIT* solutions are designed with flexibility to support your growing and changing network requirements.

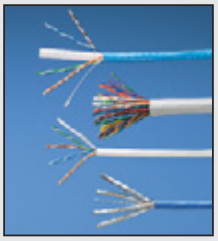
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Copper Cabling System Roadmap

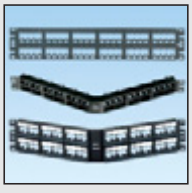


Data Center Telecommunications Room

1 *TX* Copper Cable (pages B1.2 – B1.5)



3 *MINI-COM*® Modular Patch Panels (pages C1.6 – C1.15)



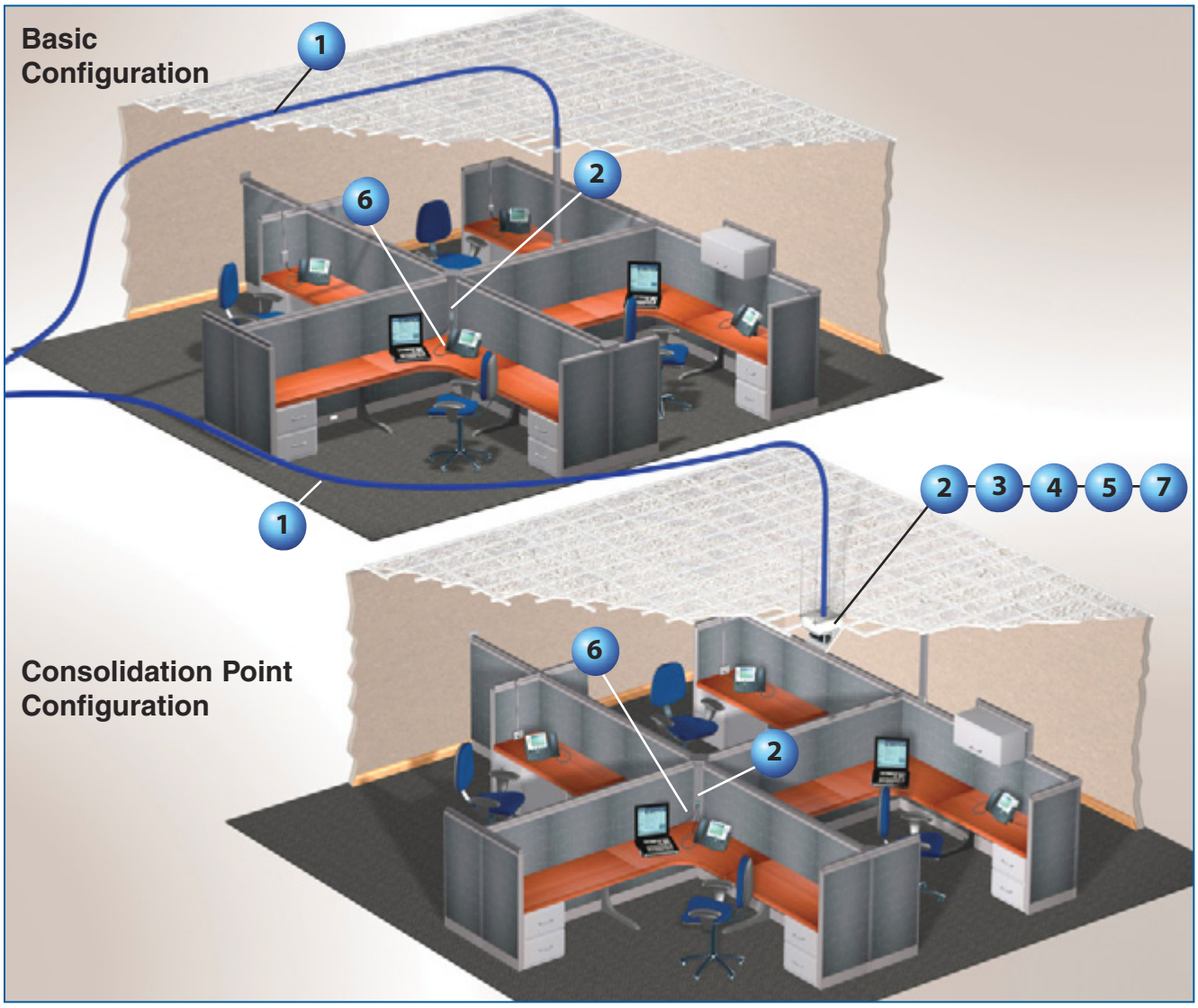
2 *MINI-COM*® Jack Modules (pages B2.2 – B2.8)



4 Punchdown and Coupler Patch Panels (pages C1.16 – C1.23)

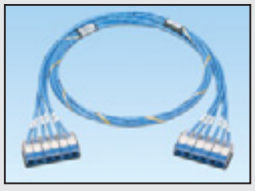


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Workstation Area

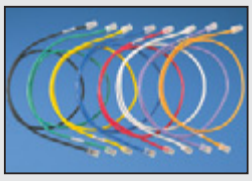
5 **QUICKNET™ Copper Cabling System (pages B1.25 – B1.32)**



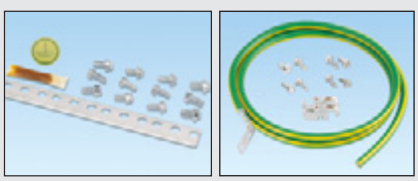
7 **Zone Cabling and Zone Cords (pages B5.1 – B5.10)**



6 **Patch Cords (pages B1.18 – B1.21)**



8 **Grounding and Bonding (pages C5.1 – C5.48)**



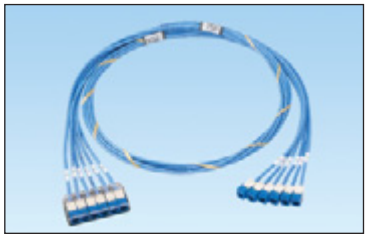
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NEW! QUICKNET™ Pre-Terminated Cable Assemblies

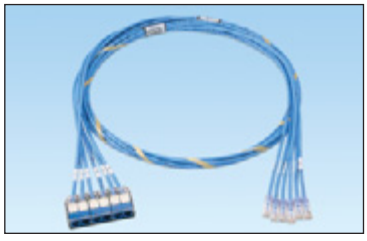
- Allow quick network deployment compared to field-terminated installations
- 100% performance tested to electrical permanent link specifications
- Terminated in factory controlled environment for consistent network performance
- Enable complete customization for all structured cabling requirements
- Pre-bundled with six cables for easy installation
- Category 6 UTP and Category 6A UTP/STP performance levels available
- Plenum or riser cable fire ratings
- Available in one foot increments, 10' – 295'
- Enable multiple termination types including, pre-terminated cassettes, jack modules, modular plug and/or unterminated options
- Pre-terminated cassettes snap in and out of QUICKNET™ Patch Panels
- Quality assurance label includes serialized number for future traceability, performance level, and assembly length
- Shipped with permanent link test date for each link
- Custom labeling available upon request, contact customer service
- Optional pulling eye available upon request for additional ease of installation, contact customer service
- Alien crosstalk test results for Category 6A assemblies are available upon request, contact customer service
- For proper bonding of QUICKNET™ Pre-Terminated Shielded Cable Assemblies, see the STRUCTUREDGROUND™ Equipment Jumper Kit RGEJ1057PFY on page C5.18



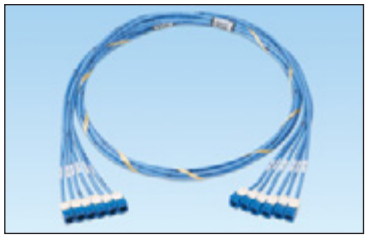
Cassette to Cassette



Cassette to Jack Modules



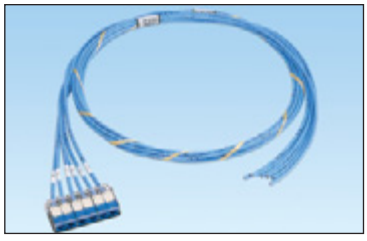
Cassette to Plugs



Jack Modules to Jack Modules



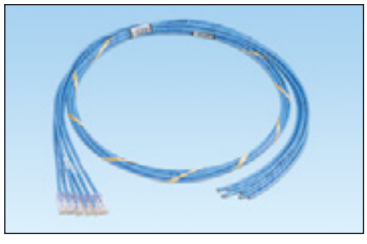
PAN-PLUG® Modular Plugs to PAN-PLUG® Modular Plugs



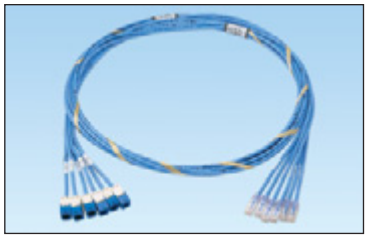
Cassette to Unterminated



Jack Modules to Unterminated



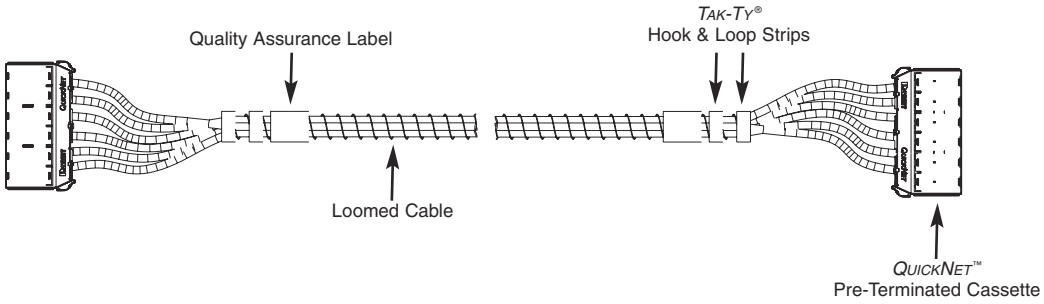
PAN-PLUG® to Unterminated



Jack Modules to PAN-PLUG® Modular Plugs

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QUICKNET™ Pre-Terminated Cable Assemblies (continued)



Ordering Information

Example:

Q	A	P	B	C	B	C	B	X	X	10
1	2	3	4	5	6	7	8	9	10	11

1 – Q = QUICKNET™

2 – Performance Level
A = Category 6A (*10GIG*™) UTP
B = Category 6 Enhanced UTP
C = Category 6 UTP
E = Category 6A (*10GIG*™) STP

3 – Flame/Smoke Rating
R = Riser or P = Plenum

4 – Cable Color
B = Blue or W = White

5 – Termination End 1
C = Cassette, J = Jack modules
P = Modular plugs
K = Jack modules staggered right
L = Jack modules staggered left
Q = Modular plugs staggered right
S = Modular plugs staggered left

6 – Termination End 1 Jack Module Color*
B = Blue, E = Electric Ivory, G = Green, H = Off White,
I = International Gray, L = Black, O = Orange, R = Red,
V = Violet, W = White, Y = Yellow
(Shielded jack modules available in L (Black) only)

7 – Termination End 2
C = Cassette
J = Jack modules
P = Modular plugs
K = Jack modules staggered left
L = Jack modules staggered right
Q = Modular plugs staggered right
S = Modular plugs staggered left
U = Unterminated
O = Unterminated with cassette and jack modules for on-site termination

8 – Termination End 2 Jack Module Color*
B = Blue, E = Electric Ivory, G = Green, H = Off White,
I = International Gray, L = Black, O = Orange, R = Red,
V = Violet, W = White, Y = Yellow
(Shielded jack modules available in L (Black) only)

9 – Assembly Options
P = Pulling Eye
T = Alien Crosstalk test results
B = Pulling Eye and Alien Crosstalk test results
X = No assembly options requested

10 – Custom Labeling**
L = Custom assembly label
C = Custom cable labels
B = Custom assembly and cable labels
X = No custom labels requested

11 – Assembly Length***
10' – 295'

*Color option not available for modular plugs or unterminated options. All modular plugs are clear and shielded jack modules are black.
**Custom cable assembly labels are available up to eighteen characters; individual cable labels are available up to fifteen characters.
***QUICKNET™ Pre-Terminated Cable Assemblies are available in 1' increments in lengths 10' – 295'.
All connectivity is wired T568B. Category 6 Enhanced Performance level utilizes *PANDUIT® TX6500™* Category 6 UTP Cable.
Permanent link test results shipped with each cable assembly, alien crosstalk test result available as option for Category 6A cabling.

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NEW! QUICKNET™ Patch Panels

- Accept QUICKNET™ Pre-Terminated Cassettes which snap in and out with one hand
- High density patch panels conserve valuable rack space
- Angled patch panels facilitate proper bend radius control and minimize the need for horizontal cable managers
- Optional patch panel adapter accepts all MINI-COM® Modules for UTP, fiber optic, audio/visual applications
- Optional patch panel blank promotes proper airflow and cooling
- Label/label cover kit (QPPLC24) provides port and panel identification for 24-port patch panels
- Pre-printed numbers above each port for easy identification
- Mount to standard EIA 19" racks or 23" racks with optional extender brackets


QAPP24BL


QAPP48HDBL


QPP24BL


QPP48HDBL


QPPABL


QPPBBL

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
QUICKNET™ Angled Patch Panels				
QAPP24BL	24-port angled patch panel which accepts QUICKNET™ Pre-Terminated Cassettes and Patch Panel Adapters.	1	1	10
QAPP48HDBL	48-port angled patch panel which accepts QUICKNET™ Pre-Terminated Cassettes and Patch Panel Adapters.	1	1	10
QUICKNET™ Patch Panels				
QPP24BL	24-port patch panel which accepts QUICKNET™ Pre-Terminated Cassettes and Patch Panel Adapters.	1	1	10
QPP48HDBL	48-port patch panel which accepts QUICKNET™ Pre-Terminated Cassettes and Patch Panel Adapters.	1	1	10
Patch Panel Adapter				
QPPABL	QUICKNET™ Patch Panel Adapter which accepts all MINI-COM® Modules.	—	1	10
Patch Panel Blank				
QPPBBL	QUICKNET™ Patch Panel Blank reserves space for future use and promotes proper airflow and cooling.	—	1	10

^One rack space = 1.75" (44.45mm).
M6 and #12-24 mounting screws included.

MINI-COM® ULTIMATE ID® TX6™ PLUS Modular Patch Panel Kits

- Supplied with black MINI-COM® TX6™ PLUS Jack Modules
- Include color coded termination caps
- Front access faceplates in panels
- Available with or without labels
- Include EGJT termination tool
- Can be clearly identified with the PANTHER™ LS8E or COUGAR™ LS9 Hand-Held Thermal Transfer Printers


UICMPPKA6G24BL


UICMPPK6G24BL

Part Number	Part Description	Labels Required	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
MINI-COM® ULTIMATE ID® Angled Modular Patch Panel Kits					
UICMPPKA6G24BL	24-port UICMPPA24BL angled patch panel with 24 CJ688TGBL Jack Modules.	Six 4-Port	1	1	10
MINI-COM® ULTIMATE ID® Modular Patch Panel Kits					
UICMPPK6G24BL	24-port UICMPP24BL patch panel with 24 CJ688TGBL Jack Modules.	Six 4- Port	1	1	10

^One rack space = 1.75" (44.45mm).
Includes #12-24 and metric M6 screws to mount the patch panel to the rack.
ULTIMATE ID® Labels can be found on page F1.8.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® TX6™ PLUS Modular Patch Panel Kits

- Supplied with black *MINI-COM® TX6™ PLUS* Jack Modules
- Include color coded termination caps
- Front access faceplates in panels
- Available with or without labels
- Include EGJT termination tool


CPPKA6G24WBL


CPPK6G24WBL


CPPKLA6G24WBL


CPPKL6G24WBL

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
MINI-COM® Modular Patch Panel Kits				
CPPKA6G24WBL PATENTED	24-port angled patch panel with 24 CJ688TGBL jack modules.	1	1	10
CPPK6G24WBL	24-port CPP24WBL patch panel with 24 CJ688TGBL jack modules.	1	1	10
MINI-COM® Modular Patch Panel Kits – with Labels				
CPPKLA6G24WBL PATENTED	24-port CPPLA24WBL angled patch panel with 24 CJ688TGBL jack modules.	1	1	10
CPPKL6G24WBL	24-port CPPL24WBL patch panel with 24 CJ688TGBL jack modules.	1	1	10

^One rack space = 1.75" (44.45mm).
Includes #12-24 and metric M6 screws to mount the patch panel to the rack.

MINI-COM® ULTIMATE ID® Modular Patch Panels

- *ULTIMATE ID®* components are part of a complete system for identification designed to efficiently support TIA/EIA-606-A standard labeling requirements; reference page A1.6 for a complete system overview
- Mount to standard EIA 19" rack or 23" racks with optional extender bracket on page B4.19
- Accept *MINI-COM®* Modules for UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Can be clearly identified with the *PANTHER™* LS8E or *COUGAR™* LS9 Hand-Held Thermal Transfer Printers
- Non-adhesive computer printable label sheets for desktop printers and write-on labels available
- Replacement label covers available
- Labels sold separately
- Angled patch panels facilitate proper bend radius control and minimize the need for horizontal cable managers

ULTIMATE ID


UICMPPA24BLY PATENTED


UICMPPA48BLY


UICMPP24BLY


UICMPP48BLY

Part Number	Part Description	No. of Rack Spaces^	Labels Required*	Std. Pkg. Qty.	Std. Ctn. Qty.
MINI-COM® ULTIMATE ID® Angled Modular Patch Panels					
UICMPPA24BLY	24-port angled patch panel with six UICPPL4BL *MINI-COM® ULTIMATE ID®* Faceplates.	1	Six 4-Port	1	10
UICMPPA48BLY	48-port angled patch panel with twelve UICPPL4BL *MINI-COM® ULTIMATE ID®* Faceplates.	2	Twelve 4-Port	1	10
MINI-COM® ULTIMATE ID® Modular Patch Panels					
UICMPP24BLY	24-port patch panel with six UICPPL4BL *MINI-COM® ULTIMATE ID®* Faceplates.	1	Six 4-Port	1	10
UICMPP48BLY	48-port patch panel with twelve UICPPL4BL *MINI-COM® ULTIMATE ID®* Faceplates.	2	Twelve 4-Port	1	10

^One rack space = 1.75" (44.45mm).
Includes #12-24 and metric M6 screws to mount the patch panel to the rack.
**ULTIMATE ID®* Labels can be found on page F1.8

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MINI-COM® Flush Mount Modular Patch Panels

- Rear mounted faceplates allow modules to be flush with front of patch panel
- Angled patch panels facilitate proper bend radius control and minimize the need for horizontal cable managers
- Accept MINI-COM® Modules for UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Pre-printed numbers above each port for easy identification
- White write-on areas for port and/or panel identification
- Mount to standard EIA 19" racks or 23" racks with optional extender brackets on page C4.25



CPPA24FMWBLY



CPPA48FMWBLY



CPP24FMWBLY

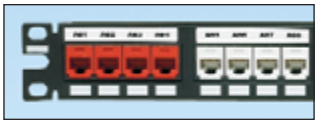


CPP48FMWBLY

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
MINI-COM® Angled Flush Mount Modular Patch Panels				
CPPA24FMWBLY	Angled 24-port flush mount patch panel supplied with rear mounted faceplates.	1	1	10
CPPA48FMWBLY	Angled 48-port flush mount patch panel supplied with rear mounted faceplates.	2	1	10
MINI-COM® Flush Mount Modular Patch Panels				
CPP24FMWBLY	24-port flush mount patch panel supplied with rear mounted faceplates.	1	1	10
CPP48FMWBLY	48-port flush mount patch panel supplied with rear mounted faceplates.	2	1	10

^One rack space = 1.75" (44.45mm).
Includes #12-24 and metric M6 screws to mount the patch panel to the rack.

Component Labels for MINI-COM® Flush Mount Modular Patch Panels



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Panel Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
All Flush Mount Patch Panels on this page	**C252X030FJJ**	**C252X030YPT**	**C252X030FJC**	**T031X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® ULTIMATE ID® Modular Patch Panel Frames

- *ULTIMATE ID®* components are part of a complete system for identification designed to efficiently support TIA/EIA-606-A standard labeling requirements; reference page A1.6 for a complete system overview
- Angled patch panels facilitate proper bend radius control and minimize the need for horizontal cable managers
- Mount to standard EIA 19" rack or 23" racks with optional extender bracket on page B4.19
- For use with *MINI-COM® ULTIMATE ID®* Patch Panel Faceplates
- Allow for custom configuration



CPPA24BLY



CPPA48BLY



CPP24BLY



CPP48BLY

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
	***MINI-COM® ULTIMATE ID®* Angled Modular Patch Panel Frames**			
CPPA24BLY	Angled metal panel, accepts six UICPP2L4BL or UICPPL4BL *ULTIMATE ID®* Patch Panel Faceplates.	1	1	10
CPPA48BLY	Angled metal panel, accepts twelve UICPP2L4BL or UICPPL4BL *ULTIMATE ID®* Patch Panel Faceplates.	2	1	10
	***MINI-COM® ULTIMATE ID®* Modular Patch Panel Frames**			
CPP24BLY	Flat metal panel, accepts six UICPP2L4BL or UICPPL4BL *ULTIMATE ID®* Patch Panel Faceplates.	1	1	10
CPP48BLY	Flat metal panel, accepts twelve UICPP2L4BL or UICPPL4BL *ULTIMATE ID®* Patch Panel Faceplates.	2	1	10

^One rack space = 1.75" (44.45mm).
Includes #12-24 and metric M6 screws to mount the patch panel to the rack.

MINI-COM® ULTIMATE ID® Patch Panel Faceplates for Modular Patch Panel Frames

- *ULTIMATE ID®* components are part of a complete system for identification designed to efficiently support TIA/EIA-606-A standard labeling requirements; reference page A1.6 for a complete system overview
- Accept *MINI-COM®* Modules for UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Used with faceplate ready modular patch panel frames
- Allow for custom configuration
- Supplied with label covers, labels sold separately
- Two label pocket faceplate allows port and panel identification; also permits patch cords to be routed without blocking port ID
- Can be clearly identified with the *PANTHER™* LS8E or *COUGAR™* LS9 Hand-Held Thermal Transfer Printers
- Non-adhesive computer printable label sheets for desktop printers and write-on labels available
- Replacement label covers available



UICPP2L4BL



UICPPL4BL

Part Number	Part Description	Labels Required	Std. Pkg. Qty.	Std. Ctn. Qty.
UICPP2L4BL	Patch panel faceplate with two label pockets, accepts up to four *MINI-COM®* Modules.	Two 4-Port	1	10
UICPPL4BL	Patch panel faceplate with one label pocket, accepts up to four *MINI-COM®* Modules.	One 4-Port	1	10

Faceplates shown include labels installed, labels sold separately.
**ULTIMATE ID®* Labels can be found on page F1.8

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MINI-COM® High Density Modular Patch Panels

- Conserve valuable rack space
- Angled patch panels facilitate proper bend radius control and minimize the need for horizontal cable managers
- Accept *MINI-COM*® Modules for UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Pre-printed numbers above each port for easy identification
- Mount to standard EIA 19" racks or 23" racks with optional extender brackets on page C4.25



CPPA48HDWBLY



CPPA72FMWBLY



CPP48HDWBLY



CPP72FMWBLY



CPP48HDEWBL



CPP48HDVNSWBL

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
	***MINI-COM*® Angled High Density Modular Patch Panels**			
CPPA48HDWBLY	48-port angled high density patch panel supplied with rear mounted faceplates (space not available for component labels).	1	1	10
CPPA72FMWBLY	72-port angled high density flush mount patch panel supplied with rear mounted faceplates.	2	1	10
CPPA48HDEWBL	48-port high density angled patch panel with enhanced labeling features and compatibility with *PANDUIT* hand-held printers. (Only accepts *MINI-COM*® Modules for UTP applications).	1	1	10
CPPA48HDVNSWBL	48-port high density angled patch panel with vertical numbering sequence from top to bottom across panel.	1	1	10
	***MINI-COM*® High Density Modular Patch Panels**			
CPP48HDWBLY	48-port high density patch panel supplied with rear mounted faceplates (space not available for component labels).	1	1	10
CPP72FMWBLY	72-port high density flush mount patch panel supplied with rear mounted faceplates.	2	1	10
CPP48HDEWBL	48-port high density patch panel with enhanced labeling features and compatibility with *PANDUIT* hand-held printers. (Only accepts *MINI-COM*® Modules for UTP applications).	1	1	10
CPP48HDVNSWBL	48-port high density patch panel with vertical numbering sequence from top to bottom across panel.	1	1	10

^One rack space = 1.75" (44.45mm).
Includes #12-24 and metric M6 screws to mount the patch panel to the rack.

Component Labels for *MINI-COM*® High Density Modular Patch Panels



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Panel Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER*™ LS8E Hand-Held Printer Label**	***COUGAR*™ LS9 Hand-Held Printer Label**
CPPA72FMWBLY	**C261X030FJJ**	**C261X030YPT**	**C261X030FJC**	**T031X000FJC-BK**
CPP72FMWBLY				

48-port high density patch panel layout does not allow space for component labels.
For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® Modular Faceplate Patch Panels

- Release snap feature on faceplate allows simple front access for termination and accessibility to installed modules
- Angled patch panels facilitate proper bend radius control and minimize the need for horizontal cable managers
- Accept MINI-COM® Modules for UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Label versions available for easy port identification; replacement label/label covers available
- Mount to standard EIA 19" racks or 23" racks with optional extender brackets on page C4.25


CPPLA24WBLY


CPPLA48WBLY


CPPL24WBLY


CPPL48WBLY


CPP24WBLY

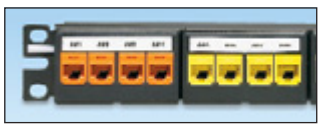

CPP48WBLY


C4PPLK

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
	MINI-COM® Angled Modular Patch Panels with Labels			
CPPLA24WBLY	24-port angled patch panel with labels, supplied with six factory installed CFFPL4 type front removable snap-in faceplates.	1	1	10
CPPLA48WBLY	48-port angled patch panel with labels, supplied with twelve factory installed CFFPL4 type front removable snap-in faceplates.	2	1	10
	MINI-COM® Modular Patch Panels with Labels			
CPPL24WBLY	24-port patch panel with labels, supplied with six factory installed CFFPL4 type front removable snap-in faceplates.	1	1	10
CPPL48WBLY	48-port patch panel with labels, supplied with twelve factory installed CFFPL4 type front removable snap-in faceplates.	2	1	10
	MINI-COM® Modular Patch Panels			
CPP24WBLY	24-port patch panel supplied with six factory installed CFFP4 type front removable snap-in faceplates.	1	1	10
CPP48WBLY	48-port patch panel supplied with twelve factory installed CFFP4 type front removable snap-in faceplates.	2	1	10
	Replacement Labels for MINI-COM® Modular Patch Panels			
C4PPLK	Replacement label/label cover kit for MINI-COM® Modular Patch Panels with Labels (CPPL24WBLY, CPPL48WBLY, CPPL24WRBLY, CPPL48WRBLY) and MINI-COM® Modular Furniture Faceplates with Labels (CFFPL4, CFPHSL4, CFFPEBSL4). Each kit contains six labels and six clear label covers per bag.	—	1	10

^One rack space = 1.75" (44.45mm).
Includes #12-24 and metric M6 screws to mount the patch panel to the rack.

Component Labels for MINI-COM® Modular Faceplate Patch Panels



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Panel Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	**PANTHER™ LS8E Hand-Held Printer Label**	**COUGAR™ LS9 Hand-Held Printer Label**
All Patch Panels on this Page	**C261X035Y1J**	**C261X035Y1T**	**C261X035Y1C**	**T038X000FJC-BK‡**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For non-adhesive labeling solution, do not remove liner from label.

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MINI-COM® M6 Style Modular Faceplate Patch Panels

- Arrange modules in groups of six (M6)
- Release snap feature on faceplate allows simple front access for termination and accessibility to installed modules
- Accept *MINI-COM*® Modules for UTP, fiber optic, and audio/video, which snap in and out for easy moves, adds, and changes
- Include pre-printed numbered labels with writable surface on back when pre-numbered labels are not applicable
- Mount to standard EIA 19" racks or 23" racks with optional extender brackets on page C4.25



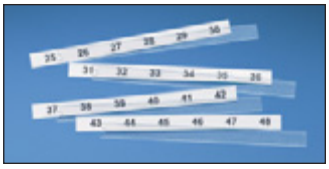
CPPL24M6BLY



CPPL48M6BLY



C6PPLK1-24



C6PPLK25-48

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
***MINI-COM*® M6 Style Modular Faceplate Patch Panels**				
CPPL24M6BLY	24-port patch panel supplied with four factory installed CFPLM6BL snap-in faceplates.	1	1	10
CPPL48M6BLY	48-port patch panel supplied with eight factory installed CFPLM6BL snap-in faceplates.	2	1	10
Replacement Labels for *MINI-COM*® M6 Style Modular Faceplate Patch Panels				
C6PPLK1-24	Replacement labels for *MINI-COM*® M6 Style Modular Faceplate Patch Panels with label/label covers (CPPL24M6BLY). Labels are pre-printed 1 – 24 on one side and write-on area on reverse side.	—	1	10
C6PPLK25-48	Replacement labels for *MINI-COM*® M6 Style Modular Faceplate Patch Panels with label/label covers (CPPL**M6BLY). Labels are pre-printed 25 – 48 on one side and write-on area on reverse side.	—	1	10

^One rack space = 1.75" (44.45mm).
Includes #12-24 and metric M6 screws to mount the patch panel to the rack.

Component Labels for *MINI-COM*® M6 Style Modular Faceplate Patch Panels



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Panel Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER*™ LS8E Hand-Held Printer Label**	***COUGAR*™ LS9 Hand-Held Printer Label**
CPPL24M6BLY CPPL48M6BLY	**C390X030Y1J**	**C390X030Y1T**	**C390X030Y1C**	**T031X000FJC-BK‡**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For non-adhesive labeling solution, do not remove liner from label.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® Recessed Modular Faceplate Patch Panels

- 3" recessed feature eliminates patch cord interference with cabinet doors and improves bend radius protection
- Release snap feature on faceplate allows simple front access for termination and accessibility to installed modules
- Accept *MINI-COM*® Modules for UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Labels included for easy port identification, replacement label/label covers available
- Mount to standard EIA 19" racks or 23" racks with optional extender brackets on page C4.25



CPPL24WRBLY



CPPL48WRBLY

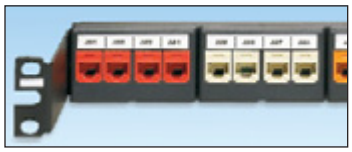


C4PPLK

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
CPPL24WRBLY	24-port recessed patch panel with labels, supplied with six factory installed CFFPL4 type front removable snap-in faceplates. Designed for use with racks and cabinets.	1	1	10
CPPL48WRBLY	48-port recessed patch panel with labels, supplied with twelve factory installed CFFPL4 type front removable snap-in faceplates. Designed for use with racks and cabinets.	2	1	10
C4PPLK	Replacement label/label cover kit for *MINI-COM*® Modular Patch Panels with Labels (CPPL24WBLY, CPPL48WBLY, CPPL24WRBLY, CPPL48WRBLY) and *MINI-COM*® Modular Furniture Faceplates with Labels (CFFPL4, CFPHSL4, CFFPEBSL4). Each kit contains six labels and six clear label covers per bag.	—	1	10

^One rack space = 1.75" (44.45mm).
Includes #12-24 and metric M6 screws to mount the patch panel to the rack.

Component Labels for *MINI-COM*® Recessed Modular Faceplate Patch Panels



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Panel Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
CPPL24WRBLY CPPL48WRBLY	C261X035Y1J	C261X035Y1T	C261X035Y1C	T038X000FJC-BK‡

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For non-adhesive labeling solution, do not remove liner from label.

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MINI-COM® 12-Port Modular Faceplate Patch Panels

- Release snap feature on faceplate allows simple front access for termination and accessibility to installed modules
- Accept MINI-COM® Modules for UTP, fiber optic and audio/video, which snap in and out for easy moves, adds, and changes
- Mount directly onto wall
- Modular design for easy cabling revisions



CWPP12WBL



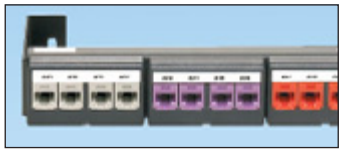
CPP12WBL



WB89D

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
CWPP12WBL	12-port patch panel supplied with three factory installed CFFP4 snap-in faceplates with integrated wall mount bracket.	1	10
CPP12WBL	12-port patch panel supplied with three factory installed CFFP4 snap-in faceplates. Mounts to standard 89D bracket (WB89D).	1	10
WB89D	Wall mount bracket accepts 12-port snap-in faceplate patch panel. Can also be used to mount industry standard 66 blocks.	1	10

Component Labels for MINI-COM® 12-Port Modular Faceplate Patch Panels



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Panel Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	**PANTHER™ LS8E Hand-Held Printer Label**	**COUGAR™ LS9 Hand-Held Printer Label**
CWPP12WBL CPP12WBL	**C261X030FJJ**	**C261X030YPT**	**C261X030FJC**	**T031X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

MINI-COM® All Metal Shielded Modular Patch Panels

- Accept MINI-COM® Modules for shielded applications
- Provide write-on areas for port identification
- Not recommended in applications where moves, adds, and changes are frequent
- Mount to standard EIA 19" racks or 23" racks with optional extender brackets on page C4.25
- For the complete grounding solution, see STRUCTUREDGROUND™ Grounding System on pages C5.1 – C5.48



CP24BLY



CP48BLY



CP24WSBLY



CP48WSBLY



CPA24BLY

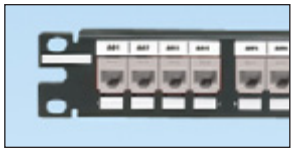


CPA48BLY

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
MINI-COM® All Metal Modular Patch Panels				
CP24BLY	24-port all metal modular patch panel.	1	1	10
CP48BLY	48-port all metal modular patch panel.	2	1	10
CP72BLY	72-port all metal modular patch panel. Rear cable management is required to prevent twisting.	2	1	10
MINI-COM® All Metal Modular Patch Panels with Strain Relief Bar				
CP24WSBLY	24-port all metal modular patch panel with strain relief bar.	1	1	10
CP48WSBLY	48-port all metal modular patch panel with strain relief bar.	2	1	10
PATENTED MINI-COM® All Metal Angled Modular Patch Panels				
CPA24BLY	24-port angled all metal patch panel.	1	1	10
CPA48BLY	48-port angled all metal patch panel.	2	1	10
CPA72BLY	72-port angled all metal patch panel.	2	1	10

^One rack space = 1.75" (44.45mm).
Includes #12-24 and metric M6 bonding screws to mount and ground the patch panel to the rack.
Each patch panel includes the CPT tool to ease removal of MINI-COM® Shielded Jack Modules.
Contact Customer Service for other available port options.

Component Labels for MINI-COM® All Metal Shielded Modular Patch Panels



Suggested Labels Solutions for TIA/EIA-606-A Compliance				
Patch Panel Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
All Metal Shielded Modular Patch Panels on this page	C252X030FJJ	C252X030YPT	C252X030FJC	T031X000FJC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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DP6™ 10GIG™ UTP Patch Panels

- Exceeds draft requirements of TIA/EIA-568-B.2-AD10 and ISO 11801 Class E_A Edition 2.1 and IEEE 802.3an-2006 ratified standard channel requirements for supporting 10GBASE-T
- Each port is 100% tested to ensure NEXT and RL performance and is individually serialized to support traceability
- Utilizes 110 punchdown termination on back panel and includes retention cap for each port
- Each port contains a universal label that is color coded for T568A and T568B wiring schemes
- Angled versions allow for higher density applications by easily routing the patch cords to each side of the panel eliminating the need for horizontal cable management
- Terminates 4-pair, 22 – 26 AWG, 100 ohm, solid or stranded twisted pair cable
- Mount to standard EIA 19" rack or 23" racks with optional extender bracket
- Write-on areas for port and panel identification
- Can be clearly identified with labels and icons
- Label kits (DPLK24 and DPLK48) contains adhesive label holder and labels for easy port and panel identification



DPA246X88TGY



DPA486X88TGY



DP246X88TGY



DP486X88TGY

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
	PATENTED DP6™ 10GIG™ Angled Patch Panel			
DPA246X88TGY	24-port, angled, Category 6A, 10 Gb/s patch panel with 24 RJ45 8-position, 8-wire ports.	1	1	10
DPA486X88TGY	48-port, angled, Category 6A, 10 Gb/s patch panel with 48 RJ45 8-position, 8-wire ports.	2	1	10
	DP6™ 10GIG™ Flat Patch Panels			
DP246X88TGY	24-port, Category 6A, 10 Gb/s patch panel with 24 RJ45 8-position, 8-wire ports.	1	1	10
DP486X88TGY	48-port, Category 6A, 10 Gb/s patch panel with 48 RJ45 8-position, 8-wire ports.	2	1	10

^One rack space = 1.75" (44.45mm).
M6 and #12-24 mounting screws included.
Replaceable punchdown modules available, part number DRJ6X88TGBL.
Termination tool (PDT110) available on page C1.44.
Must be installed as part of a complete *TX6™ 10GIG™* Copper Cabling System in order to achieve 10GBASE-T certified performance.

Component Labels for DP6™ 10GIG™ UTP Patch Panels



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Panel Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	**PANTHER™ LS8E Hand-Held Printer Label**	**COUGAR™ LS9 Hand-Held Printer Label**
All Patch Panels on this Page	**C379X030FJJ**	**C379X030YPT**	**C379X030FJC**	**T031X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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DP6™ PLUS UTP Patch Panels

- Exceeds TIA/EIA-568-B.2-1 Category 6 and ISO 11801 2nd Edition Class E standards
- Each port is 100% tested to ensure NEXT and RL performance and is individually serialized to support traceability
- Utilizes 110 punchdown termination on back panel and includes retention cap for each port
- Each port contains a universal label that is color coded for T568A and T568B wiring schemes
- Angled versions allow for higher density applications by easily routing the patch cords to each side of the panel eliminating the need for horizontal cable management
- Terminates 4-pair, 22 – 26 AWG, 100 ohm, solid or stranded twisted pair cable
- Mount to standard EIA 19" rack or 23" racks with optional extender bracket
- Write-on areas for port and panel identification
- Can be clearly identified with labels and icons
- Label kits (DPLK24 and DPLK48) contains adhesive label holder and labels for easy port and panel identification



DPA24688TGY



DPA48688TGY



DP12688TGY



DP24688TGY



DP48688TGY

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
	***DP6™ PLUS* Angled Patch Panels**			
DPA24688TGY	24-port, angled, Category 6, patch panel with 24 RJ45, 8-position, 8-wire ports.	1	1	10
DPA48688TGY	48-port, angled, Category 6, patch panel with 48 RJ45, 8-position, 8-wire ports.	2	1	10
	***DP6™ PLUS* Flat Patch Panels**			
DP12688TGY	12-port, Category 6, patch panel with twelve RJ45, 8-position, 8-wire ports. Mounts to 89D wall mount bracket.	—	1	10
DP24688TGY	24-port, Category 6, patch panel with 24 RJ45, 8-position, 8-wire ports.	1	1	10
DP48688TGY	48-port, Category 6, patch panel with 48 RJ45, 8-position, 8-wire ports.	2	1	10

^One rack space = 1.75" (44.45mm).
M6 and #12-24 mounting screws included.
Replaceable punchdown modules available, part number DRJ688TGBL.
Termination tool (PDT110) available on page C1.44.
89D wall mount bracket available on page C1.14.

Component Labels for *DP6™ PLUS* UTP Patch Panels



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Panel Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER™* LS8E Hand-Held Printer Label**	***COUGAR™* LS9 Hand-Held Printer Label**
All Patch Panels on this Page	**C379X030FJJ**	**C379X030YPT**	**C379X030FJC**	**T031X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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DP5e™ UTP Patch Panels

- Exceeds TIA/EIA-568-B.2 Category 5e and ISO 11801 Class D standards
- Each port is 100% tested to ensure NEXT and RL performance and is individually serialized to support traceability
- Utilizes 110 termination on back panel and includes retention cap for each port
- Each port contains a universal label that is color coded for T568A and T568B wiring schemes
- Angled versions allow for higher density installations by easily routing the patch cords to each side of the panel eliminating the need for horizontal cable management
- Terminates 4-pair, 22 – 26 AWG, 100 ohm, solid or stranded twisted pair cable
- Mount to standard EIA 19" rack or 23" racks with optional extender bracket
- Write-on areas for port and panel identification
- Can be clearly identified with labels and icons
- Label kits (DPLK24 and DPLK48) contains adhesive label holder and labels for easy port and panel identification



DPA245E88TGY PATENTED



DPA485E88TGY



DP125E88TGY



DP245E88TGY

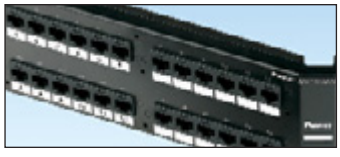


DP485E88TGY

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
***DP5e*™ Angled Patch Panels**				
DPA245E88TGY	24-port, Category 5e, patch panel with 24 RJ45, 8-position, 8-wire ports.	1	1	10
DPA485E88TGY	48-port, Category 5e, patch panel with 48 RJ45, 8-position, 8-wire ports.	2	1	10
***DP5e*™ Flat Patch Panels**				
DP125E88TGY	12-port, Category 5e, patch panel with twelve RJ45, 8-position, 8-wire ports. Mounts to 89D wall mount bracket.	—	1	10
DP245E88TGY	24-port, Category 5e, patch panel with 24 RJ45, 8-position, 8-wire ports.	1	1	10
DP485E88TGY	48-port, Category 5e, patch panel with 48 RJ45, 8-position, 8-wire ports.	2	1	10

^One rack space = 1.75" (44.45mm).
M6 and #12-24 mounting screws included.
Replaceable punchdown modules available, part number DRJ5E88TGBL.
Termination tool (PDT110) available on page C1.44.
89D wall mount bracket available on page C1.14.

Component Labels for *DP5e*™ UTP Patch Panels



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Panel Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PanTher*™ LS8E Hand-Held Printer Label**	***Cougar*™ LS9 Hand-Held Printer Label**
All Patch Panels on this page	**C379X030FJJ**	**C379X030YPT**	**C379X030FJC**	**T031X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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DATA-PATCH™ 10/100BASE-T Patch Panels

- Category 5e rated in the channel when used with Category 5e 25-pair cable assemblies
- Consist of female telco 50-pin/25-pair connectors with hook and loop fasteners wired per RJ21 industry standard for backward compatibility
- Each port is wired for 10/100BASE-T Ethernet utilizing pins 1, 2 and 3, 6
- Does not require use of a punchdown tool
- Mount to standard EIA 19" rack or 23" racks with optional extender bracket
- Write-on areas for port and panel identification
- Optional label covers available (DPLT and DPLF)
- Can be clearly identified with labels and icons



DP24584TV25Y

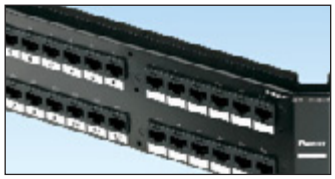


DP48584TV25Y

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
DP24584TV25Y	24-port, Category 5e, patch panel with 24 RJ45 ports wired to two RJ21 Telco connectors.	1	1	10
DP48584TV25Y	48-port, Category 5e, patch panel with 48 RJ45 ports wired to four RJ21 Telco connectors.	2	1	10

^One rack space = 1.75" (44.45mm).
M6 and #12-24 mounting screws included.
For use with DATA-PATCH™ 10/100BASE-T Cable Assemblies on page C1.29.

Component Labels for DATA-PATCH™ 10/100BASE-T Patch Panels



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Panel Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
DP24584TV25Y DP48584TV25Y	C379X030FJJ	C379X030YPT	C379X030FJC	T031X000FJC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

RJ45 – HD68 SCSI Angled Patch Panel and Patch Panel Kit

- Used for console management of selected switching equipment
- Each port 100% electrically tested
- Angled patch panel is available individually or kitted with four cable assemblies each 3' long with 68-pin DB68 male plugs on both ends
- Female 68-pin sockets on panel meet ANSI T 10.1302D SCSI Parallel Interface-3 (SPI-3) standard
- Mount to standard EIA 19" rack or 23" racks with optional extender bracket
- Pre-printed numbers above each port for easy identification



TPK1A32R88S68

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
TPA32R88S68	32-port angled patch panel with 32 RJ45 ports wired to four 68-pin SCSI connectors.	1	1	10
TPK1A32R88S68	32-port angled patch panel with 32 RJ45 ports wired to four 68-pin SCSI connectors kitted with four cable assemblies each 3' long with 68-pin DB68 male plugs on both ends.	1	1	10

^One rack space = 1.75" (44.45mm).
M6 and #12-24 mounting screws included.

Component Labels for RJ45 – HD68 SCSI Angled Patch Panel



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Panel Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER*™ LS8E Hand-Held Printer Label**	***COUGAR*™ LS9 Hand-Held Printer Label**
TPA32R88S68 TPK1A32R88S68	**C379X030FJJ**	**C379X030YPT**	**C379X030FJC**	**T031X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Voice Patch Panel

- Consists of single female telco 50-pin/25-pair connector with hook and loop fasteners wired for common active voice equipment
- 24 RJ45 ports with pins 4 and 5 active in each port
- Telco connector with hook and loop fasteners accommodate 180, 110, or 90 degree patch cord connectors on back of patch panel
- Does not require use of a punchdown tool
- Mounts to standard EIA 19" rack or 23" racks with optional extender bracket
- Write-on areas available for port identification
- Can be clearly identified with optional labels and icons



Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
VP24382TV25Y	24-port patch panel with 24 RJ45 ports wired to one RJ21 telco connector.	1	1	10

^One rack space = 1.75" (44.45mm).
M6 and #12-24 mounting screws included.

Component Labels for Voice Patch Panels



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Panel Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
VP24382TV25Y	C379X030FJJ	C379X030YPT	C379X030FJC	T031X000FJC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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NEW! DATA-PATCH™ Category 5e RJ45 to RJ21 Patch Panel

- Designed to exceed TIA/EIA-568-B.2 Category 5e and ISO 11801 2nd Edition Class D standards
- Consist of female telco 50-pin/25-pair connectors with hook and loop fasteners wired per RJ21 industry standard for backward compatibility
- Each RJ45 port is fully wired for Category 5e
- Does not require use of a punchdown tool
- Mounts to standard EIA 19" rack or 23" racks with optional extender bracket
- Write-on areas for port and panel identification
- Can be clearly identified with labels and icons
- Label/label cover kit (QPPLC24) provides port and panel identification



Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
DP245E88TV25	24-port, Category 5e, RJ45, 8-pin, fully wired to 4-port RJ21 connector patch panel.	1	1	10

^One rack space = 1.75" (44.45mm).
M6 and #12-24 mounting screws included.

DATA-PATCH™ 10/100BASE-T Cable Assemblies

- Category 5 rated 25-pair connectorized cable assemblies are enhanced performance patch cords featuring 25-pair Category 5 solid cable with Category 5, 25-pair plugs on either end
- System also includes Category 5 rated 25-pair hydra with Category 5, 25-pair male connectors on one end and 12 PAN-PLUG® Modular Plugs terminated to the 10/100BASE-T Ethernet pins (1, 2, 3, and 6) on the other end
- All cords are 100% tested for wiring sequence and continuity



UTPCH825Y**



UTPCH812PP25Y

Part Number	Part Description	Length (Ft.)	Std. Pkg. Qty.	Std. Ctn. Qty.
UTPCH8SR25Y	Straight, 110° right orientation.	8	1	10
UTPCH8SL25Y	Straight, 110° left orientation.	8	1	10
UTPCH8L25Y	Both 110° left orientation.	8	1	10
UTPCH8R25Y	Both 110° right orientation.	8	1	10
UTPCH8LR25Y	110° left, 110° right orientation.	8	1	10
UTPCH812PP25Y	Twelve PAN-PLUG® Modular Plugs, straight.	8	1	10

For lengths 6, 10, 15 and 20 replace 8 in part number for desired length. For example, the part number for a 15' straight and right 25-pair connectorized cable assembly is UTPCH15SR25.

Cable Labels for DATA-PATCH™ 10/100BASE-T Cable Assemblies



Suggested Label Solutions for TIA/EIA 606-A Compliance				
Patch Panel Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	**PANTHER™ LS8E Hand-Held Printer Label**	**COUGAR™ LS9 Hand-Held Printer Label**
All UTPCH8 Assemblies on this page	**S100X400YAJ**	**S100X400VATY**	**S100X400VAC**	**T100X000CBC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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NEW! Category 6 Coupler Patch Panel

- Designed to exceed performance requirements of the TIA/EIA-568-B.2-1 Category 6 and ISO 11801 2nd Edition Class E channel standards
- Coupler panel ports provide fast and easy plug and play connection of RJ45 patch cords
- Mounts to standard EIA 19" rack or 23" racks with optional extender bracket



Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
CP24688BLY	24-port, Category 6, patch panel with 24 pre-installed RJ45 Category 6 channel compliant couplers.	1	1	10

^One rack space = 1.75" (44.45mm).
M6 and #12-24 mounting screws included.

c UL us LISTED Category 5e Coupler Patch Panel

- Exceeds TIA/EIA-568-B.2 Category 5e and all ISO 11801 2nd Edition Class D channel standard requirements at swept frequencies up to 100 MHz
- Coupler panel ports provide fast and easy plug and play connection of RJ45 patch cords
- Mounts to standard EIA 19" rack or 23" racks with optional extender bracket



Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
CP245E88BLY	24-port, Category 5e, patch panel with 24 pre-installed RJ45 Category 5e channel compliant couplers.	1	1	10

^One rack space = 1.75" (44.45mm).
M6 and #12-24 mounting screws included.

UL LISTED CSA® BNC Coupler Panel

- Mounts to standard EIA 19" rack or 23" racks with optional extender bracket



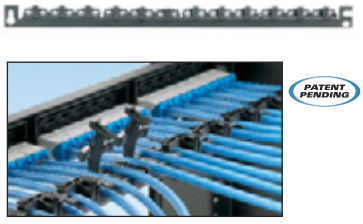
Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
CP48BNCBLY	48-port patch panel with 48 pre-installed 75 ohm BNC couplers.	1	1	10

^One rack space = 1.75" (44.45mm).
M6 and #12-24 mounting screws included.

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Strain Relief Bar with Clips

- Mounts to to the rear of standard EIA 19" racks behind each patch panel
- Supports 24 cables with hinged dual clips and provides bend radius protection
- Each adjustable clip can hold up to two cables; accommodates cable diameter range from .170" – .330" (4.3mm – 8.4mm)
- Provides superior aesthetics in cable management



Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
SRBWCY	Strain relief bar with integrated adjustable clips; supports, manages and provides bend radius protection for up to 24 cables in 1 RU.	1	1	10

^One rack space = 1.75" (44.45mm).

Strain Relief Bars for Patch Panels

- Mount to standard EIA 19" racks
- Ideal for high density patch panels to support excess cable
- *TAK-TY*® Hook & Loop Cable Ties can be used for additional cable management



SRBM19BLY



SRBCT



SRB19BLY

SRBS19BL-XY



SRBBRKT

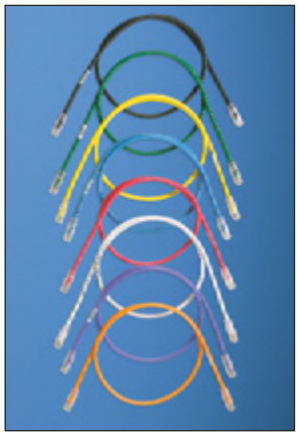
Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
Strain Relief Bar/Manager			
SRBM19BLY	Cable strain relief bar manager; attaches to 19" rack to support cables in punchdown or modular patch panel applications; provides cable management using included *TAK-TY*® Hook & Loop Cable Ties (six pieces).	1	10
SRBCT	Cable strain relief bar with cable tie clips.	1	10
Extended Strain Relief Bar			
SRB19BLY	Cable strain relief bar extends 2" off of the rack to support cables in punchdown or modular patch panel applications.	1	10
Straight Strain Relief Bar			
SRBS19BL-XY	Cable strain relief bar supports cables in punchdown or modular patch panel applications.	10	—
Strain Relief Bar Brackets			
SRBBRKT	Quick release brackets for strain relief bars; convert conventional screw mounting of strain relief bar to quick release mounting/removal.	1	10

#12-24 mounting screws included.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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TX6™ 10GIG™ UTP Patch Cords

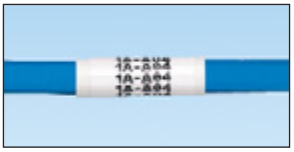
- Exceed draft requirements of TIA/EIA-568-B.2-AD10 and ISO 11801 Class E_A Edition 2.1 and IEEE 802.3an-2006 ratified standard channel requirements for supporting 10GBASE-T
- Each patch cord is 100% performance tested
- Constructed of *TX6™ 10GIG™* 24 AWG solid copper cable (nominal cable diameter is .275") and *TX6™ PLUS* Modular Plugs for superior performance
- Plug meets all applicable FCC part 68 Subpart F requirements and exceeds IEC 60603-7 specifications
- Slender strain relief boot provides easy access in high density applications
- Plug uses an integral pair manager to optimize performance and consistency by reducing untwisting of conductors within the plug
- Plug performance in center of TIA/EIA component range, ensuring interoperability and 10GBASE-T Ethernet channel performance
- Labels on patch cords provide identification of performance level, length, and quality control number
- Patented tangle free latch prevents snags and provides easy release, saving time on frequent moves, adds, and changes



Part Number	Part Description	Length (Ft.)	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
UTP6X3Y	Category 6A, 10 Gb/s UTP patch cord with *TX6™ PLUS* Modular Plugs on each end.	3	Off White	1	10
UTP6X5Y		5	Off White	1	10
UTP6X7Y		7	Off White	1	10
UTP6X10Y		10	Off White	1	10
UTP6X14Y		14	Off White	1	10
UTP6X20Y		20	Off White	1	10

For lengths 3' – 20' (increments of 1') and 25', 30', 35', 40' change the length designation in the part number to the desired length. For standard cable colors other than Off White, add suffix BL (Black), BU (Blue), RD (Red), GR (Green), YL (Yellow), OR (Orange) or VL (Violet) before the Y at the end of the part number.
For example, the part number for a blue 15' cord is UTP6X15BUY.
Must be installed as part of a complete *TX6™ 10GIG™* Copper Cabling System in order to achieve 10GBASE-T certified performance.

Cable Labels for *TX6™ 10GIG™* UTP Patch Cords



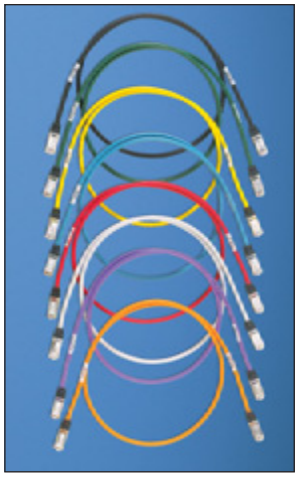
Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Cord Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER™* LS8E Hand-Held Printer Label**	***COUGAR™* LS9 Hand-Held Printer Label**
All UTP parts on this page	**S100X225YAJ**	**S100X225VATY**	**S100X225VAC**	**T100X000CBC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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TX6™ *10GIG*™ Shielded Patch Cords

- Exceed draft requirements of TIA/EIA-568-B.2-AD10 and ISO 11801 Class E_A Edition 2.1 and IEEE 802.3an-2006 ratified standard channel requirements for supporting 10GBASE-T
- Each patch cord is 100% performance tested
- Constructed of 26 AWG stranded shielded copper cable (nominal cable diameter is .23") and *TX6*™ Shielded Modular Plugs for superior performance
- Cable has overall metal shield that provides conductive path for grounding
- Plug meets all applicable FCC part 68 Subpart F requirements and exceeds IEC 60603-7 specifications
- Plug uses an integral pair manager to optimize performance and consistency by reducing untwisting of conductors within the plug
- Plug performance in center of TIA/EIA component range, ensuring interoperability and 10GBASE-T Ethernet channel performance
- Labels on patch cords provide identification of performance level, length, and quality control number
- Patented tangle free latch prevents snags and provides easy release, saving time on frequent moves, adds, and changes

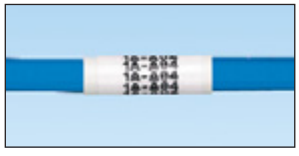


Part Number	Part Description	Length (Ft.)	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
STP6X3IG	Category 6A, 10 Gb/s STP patch cord with *TX6*™ *PLUS* Modular Plugs on each end.	3	International Gray	1	10
STP6X5IG		5	International Gray	1	10
STP6X7IG		7	International Gray	1	10
STP6X10IG		10	International Gray	1	10
STP6X14IG		14	International Gray	1	10
STP6X20IG		20	International Gray	1	10

For lengths 2' – 20' (increments of 1') and 25', 30', 35', 40' change the length designation in the part number to the desired length. For standard cable colors other than IG (International Gray) add suffix BL (Black), BU (Blue), GR (Green), RD (Red), YL (Yellow), OR (Orange) or VL(Violet) to end of part number. For example, the part number for a blue 15' cord is STP6X15BU.

Must be installed as part of a complete *TX6*™ *10GIG*™ Copper Cabling System in order to achieve 10GBASE-T certified performance.

Cable Labels for *TX6*™ *10GIG*™ Shielded Patch Cords



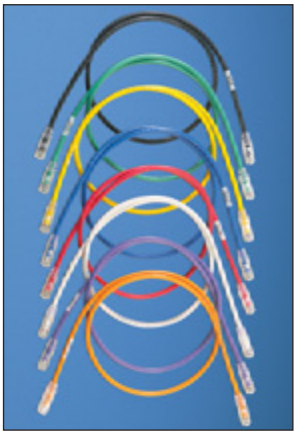
Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Cord Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER***™ **LS8E Hand-Held Printer Label**	***COUGAR***™ **LS9 Hand-Held Printer Label**
All STP6X parts on this page	**S100X225YAJ**	**S100X225VATY**	**S100X225VAC**	**T100X000CBC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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TX6™ PLUS UTP Patch Cords

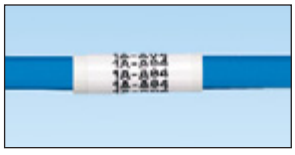
- Exceed TIA/EIA-568-B.2-1 Category 6 and ISO 11801 Class E standards
- Each patch cord is 100% performance tested
- Constructed of Category 6, 24 AWG UTP stranded cable and *TX6™ PLUS* Modular Plugs; plug contacts plated with 50 microinches of gold for superior performance
- Plug meets all applicable FCC part 68 Subpart F requirements and exceeds IEC 60603-7 specifications
- Slender strain relief boot provides easy access in high density applications
- Plug uses an integral pair manager to optimize performance and consistency by reducing untwisting of conductors within the plug
- Perform in center of TIA/EIA component range, ensuring interoperability and excellent performance
- Labels on patch cords provide identification of performance level, length, and quality control number
- Patented tangle free latch prevents snags and provides easy release, saving time on frequent moves, adds, and changes
- Third party tested for Category 6 component compliance



Part Number	Part Description	Length (Ft.)	Cable Color	Std. Pkg. Qty.	Std. Ctn. Qty.
UTPSP3Y	Category 6, UTP patch cord with *TX6™ PLUS* Modular Plugs on each end.	3	Off White	1	10
UTPSP5Y		5	Off White	1	10
UTPSP7Y		7	Off White	1	10
UTPSP10Y		10	Off White	1	10
UTPSP14Y		14	Off White	1	10
UTPSP20Y		20	Off White	1	10

For lengths 1' – 20' (increments of 1') and 25', 30', 35', 40' change the length designation in the part number to the desired length. For standard cable colors other than Off White, add suffix BL (Black), BU (Blue), GR (Green), RD (Red), YL (Yellow), OR (Orange) or VL (Violet) before Y at the end of the part number.
For example, the part number for a blue 15' cord is UTPSP15BUY.
To ensure optimal performance, *PANDUIT* recommends use with other *PANDUIT* Category 6 *PLUS* components.

Cable Labels for *TX6™ PLUS* UTP Patch Cords



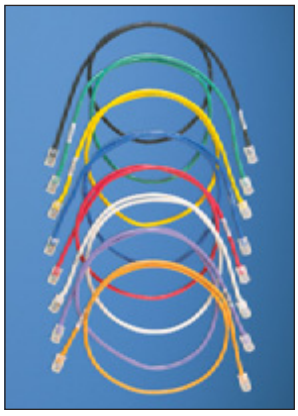
Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Cord Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER™* LS8E Hand-Held Printer Label	*COUGAR™* LS9 Hand-Held Printer Label
All UTPSP parts	S100X150YAJ	S100X150VATY	S100X150VAC	T100X000CBC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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TX5e™ UTP Patch Cords

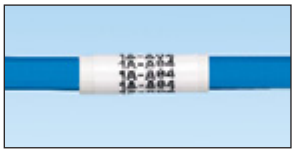
- Exceed TIA/EIA-568-B.2 Category 5e and ISO11801 Class D standards
- Each patch cord is 100% performance tested
- Constructed of Category 5e, 24 AWG UTP stranded cable and *PAN-PLUG*® Modular Plugs; plug contacts plated with 50 microinches of gold for superior performance
- Plug meets all applicable FCC part 68 Subpart F requirements and exceeds IEC 60603-7 specifications
- Patented tangle free latch prevents snags and provides easy release, saving time on frequent moves, adds, and changes
- Third party tested to Category 5e component compliance
- Labels on patch cords provide identification of performance level, length, and quality control number



Part Number	Part Description	Length (Ft.)	Cable Color	Std. Pkg. Qty.	Std. Ctn. Qty.
UTPCH3Y	Category 5e patch cord with *PAN-PLUG*® Modular Plugs on each end.	3	Off White	1	10
UTPCH5Y		5	Off White	1	10
UTPCH7Y		7	Off White	1	10
UTPCH10Y		10	Off White	1	10
UTPCH14Y		14	Off White	1	10
UTPCH20Y		20	Off White	1	10

For lengths 1' – 20' (increments of 1') and 25', 30', 35', 40' change the length designation in the part number to the desired length. For standard cable colors other than Off White, add suffix BL (Black), BU (Blue), GR (Green), RD (Red), YL (Yellow), OR (Orange) or VL (Violet) before the Y in the part number. For example, the part number for a blue 15' cord is UTPCH15BUY.

Cable Labels for *TX5e*™ UTP Patch Cords



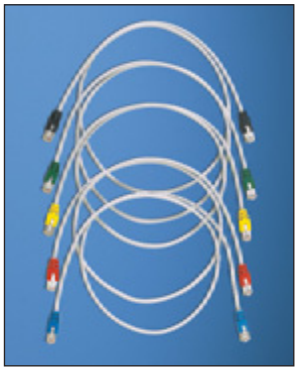
Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Cord Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER*™ LS8E Hand-Held Printer Label**	***COUGAR*™ LS9 Hand-Held Printer Label**
All UTPCH parts on this page	**S100X150YAJ**	**S100X150VATY**	**S100X150VAC**	**T100X000CBC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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TX5e™ Shielded Patch Cords

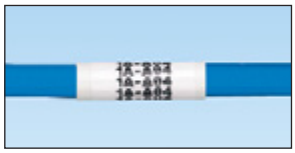
- Exceed TIA/EIA-568-B.2 Category 5e and ISO11801 Class D standards
- Each patch cord is 100% performance tested
- Constructed of Category 5e, 26 AWG, STP stranded cable and *PAN-PLUG*® Modular Plugs; plug contacts plated with 50 microinches of gold for superior performance
- Plug meets all applicable FCC part 68 Subpart F requirements and exceeds IEC 60603-7 specifications
- Patented tangle free latch prevents snags and provides easy release, saving time on frequent moves, adds, and changes
- Labels on patch cords provide identification of performance level, length, and quality control number



Part Number	Part Description	Length (m)	Boot Color	Cable Color	Std. Pkg. Qty.	Std. Ctn. Qty.
STPCH1MBBL	Category 5e, STP patch cord with *PAN-PLUG*™ Modular Plugs on each end.	1	Black	International Gray	1	10
STPCH2MBBL		2	Black	International Gray	1	10
STPCH3MBBL		3	Black	International Gray	1	10
STPCH5MBBL		5	Black	International Gray	1	10
STPCH7MBBL		7	Black	International Gray	1	10
STPCH10MBBL		10	Black	International Gray	1	10

For lengths 1m – 10m (increments of 1m) and 0.5m, 1.5m, 2.5m, 15m, 20m, 25m, 30m, 35m, 40m change the length designation in the part number to the desired length. For boot colors other than Black, replace suffix BL (Black) with BU (Blue), GR (Green), RD (Red) or YL (Yellow). For example, the part number for a 15m cord with blue boots is STPCH15MBBU.

Cable Labels for *TX5e*™ Shielded Patch Cords



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Cord Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
All STPCH parts on this page	S100X150YAJ	S100X150VATY	S100X150VAC	T100X000CBC-BK

For complete labeling solutions and product information, reference charts on page F1.5 – F1.12.

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Self-Laminating Cable Marker Holders for Large Cables or Cable Bundles

- Durable tag to mark a wide range of cables and cable bundles
- Can be used with printer generated labels or hand-written
- Attaches easily with *PANDUIT* intermediate or standard cross-section nylon cable ties or *PANDUIT*® TAK-TY® Hook & Loop Cable Ties
- Clear overlaminate protects legend
- Can be applied as a wrap-around marker (parallel to cable) or flag marker (45° or 90° to cable)
- Available in white, yellow, orange, gray and brown
- Large label area provides ample room for complex labeling scheme
- Can be used with part numbers C200X100FJJ, C200X100YPT, C200X100FJC



SLCT-WH

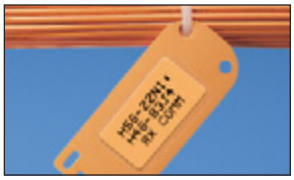


SLCT-OR

Part Number	Part Description	Width		Height		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm		
SLCT-WH	White, self-laminating cable marker holder, 25 tags/pkg.	3.00	76.20	1.31	33.30	1	4
SLCT-OR	Orange, self-laminating cable marker holder, 25 tags/pkg.	3.00	76.20	1.31	33.30	1	4
SLCT-YL	Yellow, self-laminating cable marker holder, 25 tags/pkg.	3.00	76.20	1.31	33.30	1	4
SLCT-IG	Gray, self-laminating cable marker holder, 25 tags/pkg.	3.00	76.20	1.31	33.30	1	4

Attach with *PANDUIT* Intermediate or Standard cross section cable ties.

Component Labels for Self-Laminating Cable Marker Holders for Large Cables or Cable Bundles



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Cable Marker Holder Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
All SLCT Parts	**C200X100FJJ**	**C200X100YPT**	**C200X100FJC**	**T100X000VPC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Thermal Transfer Marker Plates

- Marker plates offer crisp, clear legends with superior legibility
- Print custom marker plates on demand with a thermal transfer printer
- Attachable in a horizontal or vertical orientation
- Available in a variety of colors and sizes



Part Number	Part Description	Width		Height		Print-On Area Width		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm		
M300X100Y6T	Yellow, thermal transfer marker plate.	3.00	76.20	1.00	25.40	1.80	45.70	1	4
M300X100Y7T	White, thermal transfer marker plate.	3.00	76.20	1.00	25.40	1.80	45.70	1	4
M300X050Y6T	Yellow, thermal transfer marker plate.	3.00	76.20	.50	12.70	1.80	45.70	1	4
M300X050Y7T	White, thermal transfer marker plate.	3.00	76.20	.50	12.70	1.80	45.70	1	4
M200X100Y6T	Yellow, thermal transfer marker plate.	2.00	50.80	1.00	25.40	.80	20.30	1	4
M200X100Y7T	White, thermal transfer marker plate.	2.00	50.80	1.00	25.40	.80	20.30	1	4
M200X050Y6T	Yellow, thermal transfer marker plate.	2.00	50.80	.50	12.70	1.07	27.30	1	4
M200X050Y7T	White, thermal transfer marker plate.	2.00	50.80	.50	12.70	1.07	27.30	1	4

Order number of marker plates required in multiples of Std. Pkg. Qty.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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TX6™ *PLUS* Modular Plug

- Meets all applicable FCC Part 68 Subpart F requirements and exceeds IEC 60603-7 specifications
- Used in UTPSP series patch cords providing Category 6 performance
- Patented tangle free latch prevents snags and provides easy release saving time on frequent moves, adds, and changes
- Slender strain relief boot provides easy access in high density applications
- Integral pair manager optimizes performance and consistency by reducing untwist at plug
- Contacts plated with 50 microinches of gold
- Terminates 24 AWG, 100 ohm, stranded or solid conductor with max. conductor insulation diameter of .041"



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
SP688-C	8-position, 8-wire modular plug.	100	1000

To ensure optimal performance, *PANDUIT* recommends use with other *PANDUIT* Category 6 *PLUS* components. MPT5-8 crimp tool required for termination. Termination tool available on page C1.32.

TX6™ *PLUS* Shielded Modular Plug

- Meets all applicable FCC Part 68 Subpart F requirements and exceeds IEC 60603-7 specifications
- Used in STP6X series patch cords providing Category 6/*10GIG*™ performance
- Patented tangle free latch prevents snags and provides easy release saving time on frequent moves, adds, and changes
- Slender strain relief boot provides easy access in high density applications
- Integral pair manager optimizes performance and consistency by reducing untwist at plug
- Contacts plated with 50 microinches of gold
- Shielded plug housing provides conductive path for grounding
- Terminates 24 – 26 AWG, 100 ohm, stranded or solid shielded cable with max. conductor insulation diameter of .040"



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
SPS688-C	8-position, 8-wire shielded modular plug.	100	1000

To ensure optimal performance, *PANDUIT* recommends use with other *PANDUIT* Category 6 *PLUS* components. MPT5-8 crimp tool required for termination. Termination tool available on page C1.32.

PAN-PLUG® High Performance Modular Plugs

- Meets all applicable FCC Part 68 Subpart F requirements and exceeds IEC 60603-7 specifications
- Used in UTPCH series patch cords providing Category 5e performance
- Patented tangle free plug latch prevents snags and provides easy release saving time on frequent moves, adds, and changes
- Simplified termination due to a unique process which requires no loading bar; guide ramp facilitates easy conductor insertion and termination
- Contacts plated with 50 microinches of gold
- Terminates 24 AWG stranded or solid conductor with max. conductor insulation diameter of .040"



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
MP588-C	8-position, 8-wire modular plug.	100	1000
MP588-L	8-position, 8-wire modular plug.	50	250
MP588-M	8-position, 8-wire modular plug.	1000	5000

MPT5-8 crimp tool required for termination. Termination tool available on page C1.32.

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PAN-PLUG® Shielded High Performance Modular Plug

- Meets all applicable FCC Part 68 Subpart F requirements and exceeds IEC 60603-7 specifications
- Used in STPCH series patch cords providing Category 5e performance
- Patented tangle free latch prevents snags and provides easy release saving time on frequent moves, adds, and changes
- Simplified termination requires no loading bar, guide ramp facilitates easy conductor insertion and termination
- Contacts plated with 50 microinches of gold
- Shielded plug housing provides conductive path for grounding
- Terminates 24 – 26 AWG 100 ohm stranded or solid shielded cable with max. conductor insulation diameter of .040"



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
MPS588-C	8-position, 8-wire shielded modular plug.	100	1000

To ensure optimal performance, *PANDUIT* recommends use with other *PANDUIT* Category 5e components. MPT5-8 crimp tool required for termination. Termination tool available below.

Modular Plug and Patch Cord Tools

- WPT-8 arranges all eight conductors in the proper sequence and provides proper gauge length for trimming conductors for MP588
- MPT5-8 required for modular plug termination
- PCRT easily removes patch cords in dense rack installations



WPT-8



MPT5-8



PCRT



KPCRT-FL

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
Wire Prep Tool			
WPT-8	Separates and holds conductors in position prior to insertion into modular plug for termination. For use with *PAN-PLUG®* Modular Plug (MP588) only.	1	10
Modular Plug Installation Tools			
MPT5-8	Crimp tool for *TX6™ PLUS* and *PAN-PLUG®* Modular Plugs.	1	—
Patch Cord Removal Tool			
PCRT	Easily removes copper and fiber patch cords in dense rack installations.	1	—
Flashlight Kit			
KPCRT-FL	Flashlight kit for patch cord removal tool (PCRT).	1	—

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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GP6™ *PLUS* Category 6 High Density Kits

- Exceed TIA/EIA-568-B.2-1 Category 6 standard
- Ideal for use in cross-connects and consolidation point applications
- Provides pre-packaged components necessary for termination
- Kit includes required quantity of bases and 4-pair connecting blocks, label holders and labels
- Highly visible color coded wiring slots ease wiring



GPKBW144Y



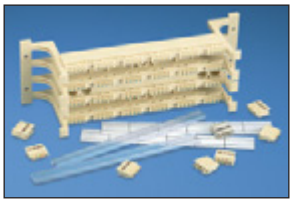
GPKBW432Y

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
GPKBW144Y	144-pair (36-port) Category 6 high density punchdown field termination kit with legs.	1	10
GPKBW432Y	432-pair (108-port) Category 6 high density field termination kit with legs.	1	10

Cable requirement: terminates most 22 – 26 AWG solid or stranded IWC wire with a .050" (1.27mm) max o.d., either PVC or plenum rated.
Termination tool available on page C1.37.
To ensure optimal performance, *PANDUIT* recommends use with other *PANDUIT* Category 6 *PLUS* components.
Can be clearly identified with labels found on page C1.36.

GP6™ *PLUS* Category 6 Standard Density Kits

- Exceed TIA/EIA-568-B.2-1 Category 6 standard
- Ideal for use in cross-connects and consolidation point applications
- Provide pre-packaged components necessary for termination
- Kit includes required quantity of bases and 4-pair connecting blocks, label holders and labels
- Highly visible color coded wiring slots ease wiring



GPKBW24Y



GPKBW72Y

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
GPKBW24Y	96-pair (24-port) Category 6 punchdown base field termination kit with legs.	1	10
GPKBW72Y	288-pair (72-port) Category 6 punchdown base field termination kit with legs.	1	10

Cable requirement: terminates most 22 – 26 AWG solid or stranded IWC wire with a .050" (1.27mm) max o.d., either PVC or plenum rated.
Termination tool available on page C1.37.
To ensure optimal performance, *PANDUIT* recommends use with other *PANDUIT* Category 6 *PLUS* components.
Can be clearly identified with labels found on page C1.36.

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GP6™ PLUS Category 6 High Density Rack Mount Panel Kits

- Exceed TIA/EIA-568-B.2-1 Category 6 standard
- Ideal for use in cross-connects and consolidation point applications
- Provide pre-packaged components necessary for termination
- Include required quantity of bases and 4-pair connecting blocks, label holders and labels
- Highly visible color coded wiring slots ease wiring
- Mount to standard TIA/EIA 19" racks



GPB2884R2Y



GPB2884R4WJY

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
GPB2884R2Y	Two 144-pair (36-port) Category 6 punchdown bases premounted to a panel with 4-pair connector kit included.	2	1	10
GPB2884R4WJY		4	1	10

^One rack space = 1.75" (44.45mm).
M6 and #12-24 mounting screws included.
Termination tool available on page C1.37.
Cable requirement: terminates most 22 – 26 AWG solid or stranded IWC wire with a .050" (1.27mm) max o.d., either PVC or plenum rated.
To ensure optimal performance, *PANDUIT* recommends use with other *PANDUIT* Category 6 *PLUS* components. Can be clearly identified with labels found on page C1.36.

GP6™ PLUS Category 6 Standard Density Rack Mount Panel Kits

- Exceed TIA/EIA-568-B.2-1 Category 6 standard
- Ideal for use in cross-connects and consolidation point applications
- Provide pre-packaged components necessary for termination
- Include required quantity of bases and 4-pair connecting blocks, label holders and labels
- Highly visible color coded wiring slots ease wiring
- Mount to standard TIA/EIA 19" racks



GPB484R2Y



GPB484R4WJY

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
GPB484R2Y	Two 96-pair (24-port) Category 6 punchdown bases premounted to panel with 4-pair connector kit included.	2	1	10
GPB484R4WJY	Two 96-pair (24-port) Category 6 punchdown bases and jumper troughs premounted to panel with 4-pair connector kit included.	4	1	10

^One rack space = 1.75" (44.45mm).
M6 and #12-24 mounting screws included.
Termination tool available on page C1.37.
Cable requirement: terminates most 22 – 26 AWG solid or stranded IWC wire with a .050" (1.27mm) max o.d., either PVC or plenum rated.
To ensure optimal performance, *PANDUIT* recommends use with other *PANDUIT* Category 6 *PLUS* components. Can be clearly identified with labels found on page C1.36.

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GP6™ PLUS Category 6 Connecting Blocks

- Exceed TIA/EIA-568-B.2-1 Category 6 standard
- Available in 4 or 5-pair connection blocks
- Highly visible color-coded wiring slots ease wiring
- Can be terminated with single or multiple position punchdown tools
- Can be utilized with discrete wires or *GP6™ PLUS* Patch Cord Connector
- Constructed of UL 94V-0 high impact polycarbonate material
- Patented single piece robust construction
- Optional 4-pair retaining clip (GPRC4) provides additional conductor retention and minimizes errors during moves, adds, and changes



GPCB4-*Y



GPCB5-*Y

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
4-Pair Connecting Block			
GPCB4-XY	4-pair Category 6 punchdown connecting block.	10	1000
GPCB4-CY	4-pair Category 6 punchdown connecting block.	100	1000
5-Pair Connecting Block			
GPCB5-XY	5-pair Category 6 punchdown connecting block.	10	1000
GPCB5-CY	5-pair Category 6 punchdown connection block.	100	1000

Termination tool available on page C1.37.
Cable requirement: terminates most 22 – 26 AWG solid or stranded IWC wire with a .050" (1.27mm) max o.d., either PVC or plenum rated.
To ensure optimal performance, *PANDUIT* recommends use with other *PANDUIT* Category 6 *PLUS* components.

GP6™ PLUS Category 6 High Density Bases

- Exceed TIA/EIA-568-B.2-1 Category 6 standard
- Ideal for use in cross-connects and consolidation point applications
- Highly visible color coded wiring slots eases wiring
- Sturdy one-piece design
- Available with or without mounting legs for a variety of mounting options
- Multiple mounting holes available



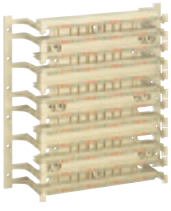
GPB144-X



GPBW144-X



GPB432-X



GPBW432-X

Part Number	Part Description	Std. Pkg. Qty.	Std. Pkg. Qty.
144-Pair (36-Port) Base			
GPB144-X	Positions and holds UTP wire for termination with Category 6 punchdown connecting blocks.	10	10
144-Pair (36-Port) Base – with Legs			
GPBW144-X	Positions and holds UTP wire for termination with Category 6 punchdown connecting blocks, includes mounting legs.	10	10
432-Pair (108-Port) Base			
GPB432-X	Positions and holds UTP wire for termination with Category 6 punchdown connecting blocks.	10	10
432-Pair (108-Port) Base – with Legs			
GPBW432-X	Positions and holds UTP wire for termination with Category 6 punchdown connecting blocks, includes mounting legs.	10	10

Termination tool available on page C1.37.
For rack mount applications see page C1.39.
Cable requirement: terminates most 22 – 26 AWG solid or stranded IWC wire with a .050" (1.27mm) max o.d., either PVC or plenum rated.
To ensure optimal performance, *PANDUIT* recommends use with other *PANDUIT* Category 6 *PLUS* components.
Can be clearly identified with label holders and recommended labels shown on page C1.36.
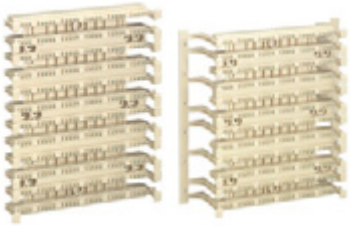
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GP6™ *PLUS* Category 6 Standard Density Bases

- Exceed TIA/EIA-568-B.2-1 Category 6 standard
- Ideal for use in cross-connects and consolidation point applications
- Highly visible color coded wiring slots ease wiring
- Sturdy one-piece design
- Available with or without mounting legs for a variety of mounting options
- Multiple mounting holes available



GPB24-X GPBW24-X



GPB72-X GPBW72-X

Part Number	Part Description	Std. Pkg. Qty.
96-Pair (24-Port) Category 6 Punchdown Base		
GPB24-X	Positions and holds UTP wire for termination with Category 6 connecting blocks.	10
96-Pair (24-Port) Category 6 Punchdown Base – with Legs		
GPBW24-X	Positions and holds UTP wire for termination with Category 6 connecting blocks, includes mounting legs.	10
288-Pair (72-Port) Category 6 Punchdown Base		
GPB72-X	Positions and holds UTP wire for termination with Category 6 connecting blocks.	10
288-Pair (72-Port) Category 6 Punchdown Base – with Legs		
GPBW72-X	Positions and holds UTP wire for termination with Category 6 connecting blocks, includes mounting legs.	10

Termination tool available on page C1.37.
For rack mount applications see page C1.39.
Cable requirement: terminates most 22 – 26 AWG solid or stranded IWC wire with a .050" (1.27mm) max o.d., either PVC or plenum rated.
To ensure optimal performance, *PANDUIT* recommends use with other *PANDUIT* Category 6 *PLUS* components.
Can be clearly identified with label holders and recommended labels shown below.

GP6™ *PLUS* Standard Density Tower Kit

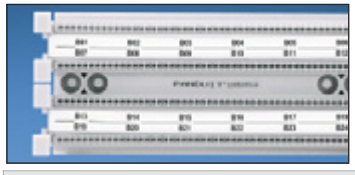
- Ideal for use in cross-connects, consolidation point, and wall mount applications
- Tower provides vertical feeder cable management
- Supplied with tower, bases, 4-pair connecting blocks, label and label holders



Part Number	Part Description	Std. Pkg. Qty.
GPKT724Y	288-pair (72-port) Category 6 punchdown standard density *GP6*™ *PLUS* Tower Kit.	1

Termination tool available on page C1.37.
Cable requirement: terminates most 22 – 26 AWG solid or stranded IWC wire with a .050" (1.27mm) max o.d., either PVC or plenum rated.
To ensure optimal performance, *PANDUIT* recommends use with other *PANDUIT* Category 6 *PLUS* components.

Component Labels for *GP6*™ *PLUS* Category 6 Standard Density Bases and *GP6*™ *PLUS* Standard Density Tower Kit



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Punchdown System Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER***™ **LS8E Hand-Held Printer Label**	***COUGAR***™ **LS9 Hand-Held Printer Label**
All GP Kits on pages C1.33 – C1.36	**C788X050Y1J**	**C788X050Y1T**	**C788X050Y1C**	**T100X000VPC-BK‡**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For non-adhesive labeling solution, do not remove liner from label.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Jumper Troughs

- Available with or without legs for a variety of mounting options
- Unique finger design maintains cable bend radius
- Provide optimum cable management when used with *GP6™ PLUS* and *PAN-PUNCH®* Bases



P110JTW-X

P110JT-X

Part Number	Part Description	Std. Pkg. Qty.
P110JTW-X	Jumper trough with legs.	10
P110JT-X	Jumper trough.	10
P110JTR2Y	Two jumper troughs mounted to two rack space panel.	1

GP6™ PLUS Termination Tools and Accessories

- Terminate wires on both cable and cross-connect sides of *GP6™* Blocks
- Reversible blade provides option of terminating without cutting wire
- 4-pair punchdown tool seats 4 or 5-pair connecting blocks



GPDTM



GPST

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
4-Pair Punchdown Tool			
GPDTM	Inserts and cuts off up to four pairs at a time, for use with *GP6™ PLUS* System only.	1	10
4-Pair Replacement Head Assembly			
GPDTMH	Replacement head assembly for *GP6™ PLUS* 4-Pair Punchdown Tool.	1	10
4-Pair Replacement Blade			
GPDTMB	Replacement blade for *GP6™ PLUS* 4-Pair Punchdown Tool.	1	10
Single Wire Punchdown Tool			
GPST	Inserts and cuts off one wire at a time, for use with *GP6™ PLUS* System only.	1	—
Single Wire Replacement Blade			
GPSTB	Replacement blade for *GP6™ PLUS* Single Wire Punchdown Tool.	1	—

GP6™ PLUS Patch Connectors

- Patch into *GP6™ PLUS* Connecting Blocks
- Field terminable
- Cable clamp on cover facilitates easier wiring
- IDCs provide reliable, gas-tight connections
- Strain relief reduces stress on cable
- Contain two-piece, snap-together housing
- Polarized to prevent reverse installation to connector block
- Clear polycarbonate cover keeps conductors visible after termination
- Cover also provides proper wiring sequence



GPC5E1-XY



GPC5E2-XY

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
GPC5E1-XY	Terminates 1-pair 24 AWG solid or stranded cable.	10	100
GPC5E2-XY	Terminates 2-pair 24 AWG solid or stranded cable.	10	100

To ensure optimal performance, *PANDUIT* recommends use with other *PANDUIT* Category 6 *PLUS* components.

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PAN-PUNCH® 110 Category 5e System Kits

- Exceed TIA/EIA-568-B.2 Category 5e standard
- Field terminable
- Ideal for use in cross-connects and consolidation point applications
- Provide pre-packaged components necessary for termination
- Include required quantity of bases and connecting blocks, label holders and labels
- Available in 100 or 300-pair bases with 3, 4, or 5-pair connecting blocks



100-Pair



300-Pair

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
100-Pair Termination Kits			
P110KB1004Y	Field terminated. Includes a base, 4-pair connector kit with five 4-pair connectors and one 5-pair connector per row of 25 pairs, two label holders, and two white designation labels.	1	10
P110KB1005Y	Field terminated. Includes a base, 5-pair connector kit with five 5-pair connectors per row of 25 pairs, two label holders, and two white designation labels.	1	10
300-Pair Termination Kits			
P110KB3004Y	Field terminated. Includes a base, 4-pair connector kit with five 4-pair connectors and one 5-pair connector per row of 25 pairs, two label holders, and two white designation labels.	1	10
P110KB3005Y	Field terminated. Includes a base, 5-pair connector kit with five 5-pair connectors per row of 25 pairs, two label holders, and two white designation labels.	1	10

It is common practice to completely fill each 25-pair wire strip with connecting blocks. Each kit contains the adequate number of connecting blocks to do so. Example: P110KB1004 includes five 4-pair and one 5-pair connecting block per 25-pair wiring strip for a total of twenty 4-pair and four 5-pair connecting blocks as well as two label holders and two white designation labels.

Termination tool available on page C1.44.

Cable requirement: terminates most 22 – 26 AWG solid or stranded IWC wire with a .050" (1.27mm) max o.d., either PVC or plenum rated.



Component Quantity per PAN-PUNCH® 110 Category 5e Kits							
	Bases		Connecting Blocks			Label Holders	Labels
Part Number	P110BW300	P110BW100	P110CB3	P110CB4	P110CB5	P110LH	DSL110
P110KB1004Y	—	1	—	20	4	2	2
P110KB1005Y	—	1	—	—	20	2	2
P110KB3004Y	1	—	—	60	12	6	6
P110KB3005Y	1	—	—	—	60	6	6

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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19" Punchdown Rack Mount Panels

- Accept punchdown bases for rack mount applications



P110B100R2BY



P110B100R4BY

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
P110B100R2BY	Panel accepts up to 2 RU of punchdown bases.	2	1	10
P110B100R4BY	Panel accepts up to 4 RU of punchdown bases.	4	1	10

^One rack space = 1.75" (44.45mm).
Includes mounting screws.

PAN-PUNCH® Category 5e 19" Rack Mount Panels

- Exceed TIA/EIA-568-B.2 Category 5e standard
- Ideal for use in cross-connects and consolidation point applications
- Mount to standard TIA/EIA 19" racks
- Exclusive deeper channel to facilitate TIA/EIA Category 5e cabling installations



P110B100R2Y



P110B100R4WJY

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
P110B100R2Y	Two 100-pair bases premounted to panel.	2	1	10
P110B100R4WJY	Two 100-pair bases with jumper troughs pre-mounted to panel.	4	1	10

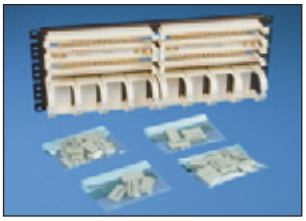
^One rack space = 1.75" (44.45mm).
Includes mounting screws.
Termination tool available on page C1.44.
For connecting blocks see page C1.41.
Can be clearly identified with label holders and recommended labels shown on page C1.40.

PAN-PUNCH® Category 5e 19" Rack Mount Panel Kits

- Exceed TIA/EIA-568-B.2 Category 5e standard
- Field terminable
- Ideal for use in cross-connects and consolidation point applications
- Include required quantity of bases and connecting blocks, label holders and labels
- Available with 4 or 5-pair connecting blocks



P110B1004R2Y



P110B1004R4WJY

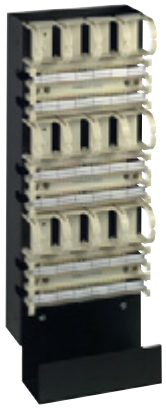
Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
Rack Mount Panel Kit with Bases and Connecting Blocks				
P110B1004R2Y	Two 100-pair bases premounted to panel. 4-pair connector kit included with five 4-pair connectors and one 5-pair connector per row of 25 pairs.	2	1	10
P110B1005R2Y	Two 100-pair bases premounted to panel. 5-pair connector kit included with five 5-pair connectors per row of 25 pairs.	2	1	10
Rack Mount Panel Kit with Bases, Connecting Blocks and Jumper Troughs				
P110B1004R4WJY	Two 100-pair bases and jumper troughs premounted to 19" rack mount panel. 4-pair connector kit included with five 4-pair connectors and one 5-pair connector per row of 25 pairs.	4	1	10
P110B1005R4WJY	Two 100-pair bases and jumper troughs pre-mounted to 19" rack mount panel with 5-pair connector kit included with five 5-pair connectors per row of 25 pairs.	4	1	10

^One rack space = 1.75" (44.45mm). Includes mounting screws.
Termination tool available on page C1.44.
Can be clearly identified with labels found on page C1.40.

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PAN-PUNCH® 110 Category 5e Tower System

- Provides a complete cross-connect system
- Designed for wall mount applications
- Available in 300 and 900 pair configurations with 3, 4, or 5-pair connecting blocks
- Supplied jumper troughs provide horizontal cable management
- Tower provides vertical feeder cable management

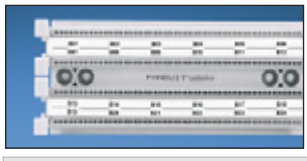


P110KT300Y

Part Number	Part Description	Std. Pkg. Qty.
PAN-PUNCH® 300-Pair Tower Kits		
P110KT3004Y	Convenient packaging includes all of the components required to completely wire a 110 base.	1
P110KT3005Y		1
PAN-PUNCH® 900-Pair Tower Kits		
P110KT9004Y	Convenient packaging includes all of the components required to completely wire a 110 base.	1
P110KT9005Y		1
PAN-PUNCH® Towers		
P110T300Y	300-pair tower. Components sold separately.	1
P110T900Y	900-pair tower. Components sold separately.	1

Each tower system contains adequate connecting blocks to complete each 25-pair wiring strip. Example: P110KT3004 includes five 4-pair and one 5-pair connecting block per 25-pair wiring strip for a total of sixty 4-pair and twelve 5-pair connecting blocks.
GP6™ PLUS system can be installed on individual towers, not recommended for use with *GP6™ PLUS* high density bases.
Termination tool available on page C1.44.
Cable requirement: terminates most 22 – 26 AWG solid or stranded IWC wire with a .050" (1.27mm) max o.d., either PVC or plenum rated.

Component Labels for PAN-PUNCH® 110 Category 5e Tower Systems



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Punchdown System Part Number	**Laser/Ink Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	**PANTHER™ LS8E Hand-Held Printer Label**	**COUGAR™ LS9 Hand-Held Printer Label**
All PAN-PUNCH® Tower Kits	**C750X050Y1J**	**C750X050Y1T**	**C750X050Y1C**	**T050X000VPC-BK‡**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For non-adhesive labeling solution, do not remove liner from label.

Vertical Cable Managers for Tower Systems

- Finger design allows for easy changes
- Can be mounted between towers
- Compatible with *GP6™ PLUS* or 110 Tower Systems
- Designed for wall mount or 19" rack mount applications
- Facilitates vertical cable management
- Rugged all metal construction



P110VCM300



P110VCM



P110VCM900

Part Number	Part Description	Color	Std. Pkg. Qty.
Vertical Cable Manager for use with 300-Pair Tower System			
P110VCM300	Mounts adjacent to 300-pair tower system.	Black	1
Vertical Cable Manager for use with 900-Pair Tower System			
P110VCM900	Mounts adjacent to 900-pair tower system.	Black	1
Vertical Cable Manager for use with Backboard Mounting			
P110VCM	Mounts to plywood backboard and adjacent to bases and jumper troughs. White metal backboard and large D-rings, designed for wall mount vertical or horizontal cable management.	White	1

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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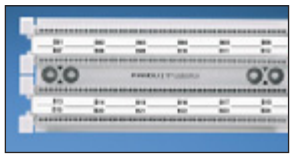
110 Punchdown Designation Label Holder

- Use with adhesive or non-adhesive designation labels



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
P110LH	Label holder snaps into 110 and *GP6*™ Bases.	6	60

Component Labels for 110 Punchdown Designation Label Holders



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Punchdown Holder Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER***™ **LS8E Hand-Held Printer Label**	***COUGAR***™ **LS9 Hand-Held Printer Label**
P110LH	**C750X050Y1J**	**C750X050Y1T**	**C750X050Y1C**	**T050X000VPC-BK‡**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For non-adhesive labeling solution, do not remove liner from label.

19" Rack Mount Bracket Kits

- Used to attach tower systems and vertical cable managers to 19" racks
- Use two towers side-by-side or a tower and a vertical wire manager side-by-side
- Include brackets and mounting screws



P110TB

Part Number	Part Description	Std. Pkg. Qty.
P110TB300Y	Kit for 300-pair tower or vertical wire management.	1
P110TB900Y	Kit for 900-pair tower or vertical wire management.	1

PAN-PUNCH® 110 Category 5e Connecting Blocks

- Exceeds TIA/EIA-568-B.2 Category 5e standard
- Available in 3, 4, or 5-pair connection blocks
- Dual IDC terminates UTP cable on 110 base and UTP cable or 110 patch cords for cross-connecting
- Highly visible color coded wiring slots ease wiring
- Can be used with single or multiple punchdown tools
- Can be utilized with discrete wires or *PAN-PUNCH*® Patch Cord Connector
- Constructed of UL 94V-0 high impact polycarbonate material
- Patented single piece robust construction



P110CB3-*Y



P110CB4-*Y



P110CB5-*Y

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
3-Pair 110 Connecting Blocks			
P110CB3-XY	3-pair connecting block.	10	1000
P110CB3-CY		100	1000
4-Pair 110 Connecting Blocks			
P110CB4-XY	4-pair connecting block.	10	1000
P110CB4-CY		100	1000
5-Pair 110 Connecting Blocks			
P110CB5-XY	5-pair connecting block.	10	1000
P110CB5-CY		100	1000

Termination tool available on page C1.44.
Cable requirement: terminates most 22 – 26 AWG solid or stranded IWC wire with a .050" (1.27mm) max o.d., either PVC or plenum rated.

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B4. Surface Raceway
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B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
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PAN-PUNCH® 110 Category 5e Bases

- Exclusive deeper channel to facilitate TIA/EIA Category 5e cabling installations
- Ideal for use in cross-connects and consolidation point applications
- Available with or without legs for various mounting options
- Sturdy one-piece design
- Highly visible color coded wiring strip



P110BW100-X



P110B100-X



P110BW300-X



P110B300-X

Part Number	Part Description	Std. Pkg. Qty.
100-Pair Base – with Legs		
P110BW100-X	Positions and holds UTP cable for termination with PAN-PUNCH® 110 Connecting Blocks. Legs allow cables to be routed behind bases.	10
100-Pair Base		
P110B100-X	Positions and holds UTP cable for termination with PAN-PUNCH® 110 Connecting Blocks. For frame or rack mount wiring behind bases.	10
300-Pair Base – with Legs		
P110BW300-X	Positions and holds UTP cable for termination with PAN-PUNCH® 110 Connecting Blocks. Legs allow cables to be routed behind bases.	10
300-Pair Base		
P110B300-X	Positions and holds UTP cable for termination with PAN-PUNCH® 110 Connecting Blocks. For frame or rack mount wiring behind bases.	10

Cable requirement: terminates most 22 – 26 AWG solid or stranded IWC wire with a .050" (1.27mm) max o.d., either PVC or plenum rated.
Can be clearly identified with label holders and recommended labels shown on page B1.33.

Jumper Troughs

- Available with or without legs for a variety of mounting options
- Unique finger design maintains cable bend radius
- Provides optimum cable management when used with *GP6™ PLUS* and PAN-PUNCH® Bases

P110JTW-X



P110JT-X

Part Number	Part Description	Std. Pkg. Qty.
P110JTW-X	Jumper trough with legs.	10
P110JT-X	Jumper trough.	10
P110JTR2Y	Two jumper troughs mounted to two rack space panel.	1

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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GP6™ PLUS Patch Cord Assemblies

- Exceed TIA/EIA-568-B.2-1 Category 6 standard
- Factory assembled patch cord assembly
- Ideal for use in cross-connects and consolidation point applications with *GP6™ PLUS* Connector Blocks



GPPC4IG*Y



GPPC4IG*AY

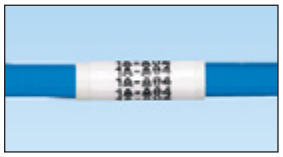


GPPC4IG*BY

Part Number	Part Description	Length (Ft.)	Std. Pkg. Qty.	Std. Ctn. Qty.
GPPC4IG3Y	One 4-pair *GP6™ PLUS* Connector on each end.	3	1	10
GPPC4IG5Y		5	1	10
GPPC4IG7Y		7	1	10
GPPC4IG9Y		9	1	10
GPPC4IG14Y		14	1	10
GPPC4IG20Y		20	1	10
GPPC4IG3AY	One 4-pair *GP6™ PLUS* Connector wired to a RJ45 *PAN-PLUG®* T568A wiring scheme.	3	1	10
GPPC4IG5AY		5	1	10
GPPC4IG7AY		7	1	10
GPPC4IG9AY		9	1	10
GPPC4IG14AY		14	1	10
GPPC4IG20AY		20	1	10
GPPC4IG3BY	One 4-pair G*P6™ PLUS* Connector wired to a RJ45 *PAN-PLUG®* T568B wiring scheme.	3	1	10
GPPC4IG5BY		5	1	10
GPPC4IG7BY		7	1	10
GPPC4IG9BY		9	1	10
GPPC4IG14BY		14	1	10
GPPC4IG20BY		20	1	10

To ensure optimal performance, *PANDUIT* recommends use with other *PANDUIT* Category 6 *PLUS* components.

Cable Labels for *GP6™ PLUS* Patch Cord Assemblies



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Cord Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER™* LS8E Hand-Held Printer Label	*COUGAR™* LS9 Hand-Held Printer Label
All GPPC4IG Parts	S100X125YAJ	S100X125VATY	S100X125VAC	T100X000CBC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

GP6™ 1 and 2-Pair Patch Cord Assemblies

- Factory assembled patch cord assembly
- Ideal for use in cross-connect applications with *GP6*™ *PLUS* Connector Blocks
- Available in a variety of lengths



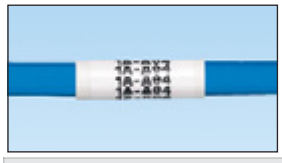
GPPC1IG*Y



GPPC2IG*Y

Part Number	Part Description	Length (Ft.)	Std. Pkg. Qty.	Std. Ctn. Qty.
GPPC1IG3Y	One 1-pair *GP6*™ Connector on each end.	3	1	10
GPPC1IG5Y		5	1	10
GPPC1IG7Y		7	1	10
GPPC1IG9Y		9	1	10
GPPC1IG14Y		14	1	10
GPPC1IG20Y		20	1	10
GPPC2IG3Y	One 2-pair *GP6*™ Connector on each end.	3	1	10
GPPC2IG5Y		5	1	10
GPPC2IG7Y		7	1	10
GPPC2IG9Y		9	1	10
GPPC2IG14Y		14	1	10
GPPC2IG20Y		20	1	10

Cable Labels for *GP6*™ 1 and 2-Pair Patch Cord Assemblies



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Cord Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
All GPPC Parts	S100X125YAJ	S100X125VATY	S100X125VAC	T100X000CBC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

PAN-PUNCH® Punchdown Tools and Accessories

- Terminate wires on both cable and cross-connect sides of 110 connecting blocks
- Single pair punchdown tool terminates on the back of the *DP6*™ *10GIG*™, *DP6*™ *PLUS*, and *DP5e*™ Patch Panels
- Reversible blade provides option of terminating without cutting wire
- 5-Pair punchdown tool seats 3, 4, or 5-pair connecting blocks onto 110 base



PDT110M



PDT110

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
5-pair Punchdown Tool			
PDT110M	5-pair punchdown tool, can terminate up to five pairs at a time.	1	10
Replacement Head			
PDH110M	Replacement head assembly for 5-pair punchdown tool.	1	10
Replacement Blade Assembly			
PDB110M	Replacement blade for 5-pair punchdown tool.	1	10
Single Punchdown Tool			
PDT110	Punchdown tool and blade for 110 style IDCs.	1	—
Replacement Blade			
PDTH110	Replacement blade for single pair punchdown tool.	1	—

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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PAN-PUNCH® 110 Patch Connectors

- Contains two-piece, snap together housing
- Field terminable
- Cable clamp on cover provides easier wiring
- IDCs provide reliable gas-tight connections
- Strain relief reduces stress on cable
- Polarized to prevent reverse installation to connector block
- Clear polycarbonate cover keeps conductors visible after termination


P110PC1-XY


P110PC2-XY


P110PC3-XY


P110PC4-XY

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
P110PC1-XY	Terminates 1-pair, 24 AWG solid or stranded cable.	10	100
P110PC2-XY	Terminates 2-pairs, 24 AWG solid or stranded cable.	10	100
P110PC3-XY	Terminates 3-pairs, 24 AWG solid or stranded cable.	10	100
P110PC4-XY	Terminates 4-pairs, 24 AWG solid or stranded cable.	10	100

PAN-PUNCH® 110 Patch Cord Assemblies

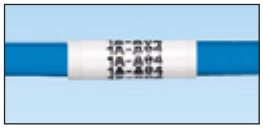
- Factory assembled patch cord assembly
- Ideal for use in cross-connect applications with PAN-PUNCH® 110 connecting blocks
- Available in a variety of lengths


P110PC*IG*Y

Part Number	Part Description	Length (Ft.)‡	Std. Pkg. Qty.	Std. Ctn. Qty.
P110PC1IG2Y	1-pair 110 connector on each end. Meets Category 3 performance requirements.	2	1	10
P110PC1IG4Y		4	1	10
P110PC1IG5Y		5	1	10
P110PC1IG6Y		6	1	10
P110PC2IG2Y	2-pair 110 connector on each end. Meets Category 5 performance requirements.	2	1	10
P110PC2IG4Y		4	1	10
P110PC2IG5Y		5	1	10
P110PC2IG6Y		6	1	10
P110PC4IG2Y	4-pair 110 connector on each end. Meets Category 5e performance requirements.	2	1	10
P110PC4IG4Y		4	1	10
P110PC4IG5Y		5	1	10
P110PC4IG6Y		6	1	10
P110PC4IG2AY	4-pair 110 connector to PAN-PLUG® RJ45 modular plug – T568A wired. Meets Category 5e performance requirements.	2	1	10
P110PC4IG4AY		4	1	10
P110PC4IG5AY		5	1	10
P110PC4IG6AY		6	1	10
P110PC4IG2BY	4-pair 110 connector to PAN-PLUG® RJ45 modular plug – T568B wired. Meets Category 5e performance requirements.	2	1	10
P110PC4IG4BY		4	1	10
P110PC4IG5BY		5	1	10
P110PC4IG6BY		6	1	10

‡For other lengths replace last number in part number with desired foot length 7, 8, 9, 12, 15 and 19.

Cable Labels for PAN-PUNCH® 110 Patch Cord Assemblies



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Cord Assemblies Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
P110PC1	S100X125YAJ	S100X125VATY	S100X125VAC	T100X000CBC-BK
P110PC2&4	S100X150YAJ	S100X150VATY	S100X150VAC	T100X000CBC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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NOTES

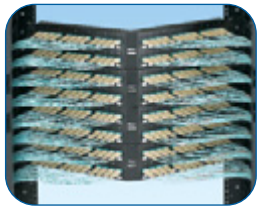
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FIBER CONNECTORS, ENCLOSURES, AND PATCH CORDS

PANDUIT offers a full line of innovative fiber connectivity and media products that meet the most demanding industry requirements for data and telecommunication applications. *PANDUIT* fiber connectivity systems provide modular solutions for applications including LANs, storage area networks, fiber-to-the-workstation and 10 Gb/s Ethernet. End-to-end high performance solutions are available for data centers, telecommunication rooms, workstations and entrance facilities.













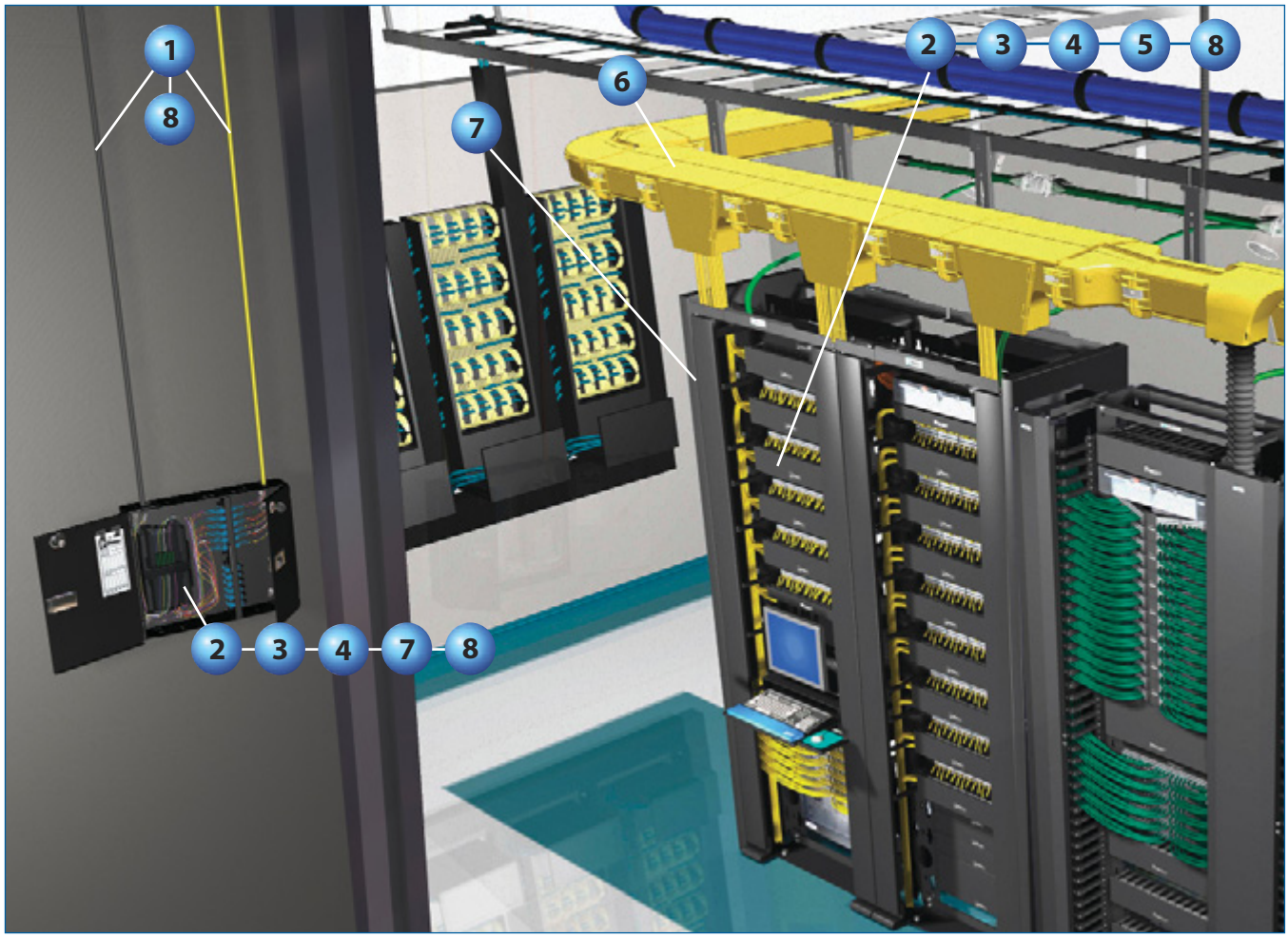
- **Complete line of fiber connectivity to fit your specific network requirements**
- **Fast, easy field installation of system components at the lowest installed cost**
- **Adaptable system design provides flexibility for current and future network growth**
- **Compatible with *MINI-COM*® Modules, Patch Panels, Faceplates and Surface Mount Boxes for complete modularity**
- **Modular high density designs maximize valuable space and simplify system updates**

PANDUIT fiber connectivity systems include a diverse selection of connectors, adapter modules, adapter panels, enclosures, patch cords, cable assemblies and accessories for both singlemode and multimode applications. *PANDUIT* solutions support the multi-gigabit data rates of today by maximizing performance, modularity, flexibility and scalability for architectures and applications of tomorrow.

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Fiber Optic Cabling System Roadmap



Telecommunications Room

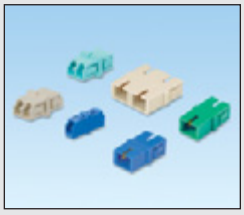
1 ***OPTI-CORE®*** **Fiber Optic Distribution Cable (Indoor, Indoor/Outdoor, and Outside Plant) (pages B1.7 – B1.20)**



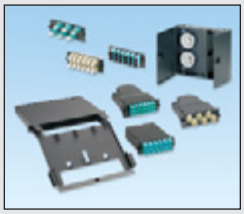
2 **Fiber Optic Connectors (LC, SC, ST), FJ® Jack Modules and Plugs, Termination Kits and Tools (pages C2.4 – C2.17)**



3 **Fiber Optic Adapters LC, SC (pages C2.18 – C2.19)**



4 **Fiber Optic Enclosures, Trays, Fiber Adapter Panels and Pre-Terminated Cassettes (pages C2.25 – C2.34)**



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Workstation Area

5 **Fiber Optic Cable Assemblies, Fan-Out Cords, Patch Cords and Pigtails (pages C2.35 – C2.53)**



7 **Cabinets, Racks, and Cable Management (pages C4.1 – C4.22)**



6 **Fiber Routing (pages C3.1 – C3.52)**



8 **Labeling and Administration (pages F1.1 – F1.18, C2.48)**



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PATENTED LC *OPTICAM*® Fiber Optic Connectors – Pre-Polished Cam Termination

- TIA/EIA-604 FOCIS-10 compatible connectors
- Exceed TIA/EIA-568-B.3 requirements
- Insertion loss: 0.3dB average (multimode and singlemode)
- Return loss: >20dB (multimode), >26dB (*10GIG*™ multimode), >50dB (singlemode)
- Spring-loaded "Senior" rear pivot latch LC connector
- Quick installation; provide field termination in less than half the time of field polish connectors
- Patented re-termination capability provides yield rates approaching 100%
- Factory pre-polished fiber endface eliminates time-consuming field polishing to reduce installation costs, labor, scrap and the number of tools required
- Cam activated fiber and buffer clamp mechanisms provide superior fiber and buffer retention – less sensitivity to fiber tensile loading
- No separate clamps, tools, or steps are required to secure both the fiber and the buffer
- *OPTICAM*® Termination Tool simplifies tooling and termination, and virtually eliminates operator error by providing visual indication of proper termination after the cam step has been completed
- Cable retention boot assemblies consistently provide higher than industry standard cable retention
- Non-optical disconnect maintains data transmission under tensile loads for jacketed cable
- Fiber cable size: 900µm tight-buffered fiber with included boot(s); 1.6mm – 2.0mm and 3.0mm jacketed cable with available *OPTICAM*® 1.6mm/2.0mm and 3.0mm Cable Retention Boot Assemblies – ten per package
- For 250µm coated fiber termination, use 250 micron fiber build-up tube kit or fan-out kits on page C2.54
- Ferrule type: 1.25mm zirconia ceramic (highest durability for repeated matings)
- Use *OPTICAM*® Termination Kit (FCAMKIT) on page C2.20



FLCDMCXAQY



FLCDMC6BLY



FLCSSCBUY



FMCBT2AQ-X



FLCCLIPBL-L

Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
LC *OPTICAM*® *10GIG*™ 50/125µm Multimode Fiber Optic Connectors				
FLCSMCXAQY	LC *OPTICAM*® *10GIG*™ 50/125µm Multimode Simplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Aqua	1	10
FLCDMCXAQY	LC *OPTICAM*® *10GIG*™ 50/125µm Multimode Duplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Aqua	1	10
LC *OPTICAM*® 50/125µm Multimode Fiber Optic Connectors				
FLCSMC5BLY	LC *OPTICAM*® 50/125µm Multimode Simplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Black	1	10
FLCDMC5BLY	LC *OPTICAM*® 50/125µm Multimode Duplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Black	1	10
LC *OPTICAM*® 62.5/125µm Multimode Fiber Optic Connectors				
FLCSMC6BLY	LC *OPTICAM*® 62.5/125µm Multimode Simplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Black	1	10
FLCDMC6BLY	LC *OPTICAM*® 62.5/125µm Multimode Duplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Black	1	10
LC *OPTICAM*® Singlemode Fiber Optic Connectors				
FLCSSCBUY	LC *OPTICAM*® Singlemode Simplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Blue	1	10
FLCDSCBUY	LC *OPTICAM*® Singlemode Duplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Blue	1	10
***OPTICAM*® 1.6/2.0mm Cable Retention Boot Assemblies**				
FMCBT2AQ-X	*OPTICAM*® *10GIG*™ 1.6/2.0mm Cable Retention Boot.	Aqua	10	100
FMCBT2BL-X	*OPTICAM*® Multimode 1.6/2.0mm Cable Retention Boot.	Black	10	100
FSCBT2BU-X	*OPTICAM*® Singlemode 1.6/2.0mm Cable Retention Boot.	Blue	10	100
***OPTICAM*® 3.0mm Cable Retention Boot Assemblies**				
FMCBT3AQ-X	*OPTICAM*® *10GIG*™ 3.0mm Cable Retention Boot.	Aqua	10	100
FMCBT3BL-X	*OPTICAM*® Multimode 3.0mm Cable Retention Boot.	Black	10	100
FSCBT3BU-X	*OPTICAM*® Singlemode 3.0mm Cable Retention Boot.	Blue	10	100
***LC OPTICAM*® Duplex Clip**				
FLCCLIPBL-L	LC *OPTICAM*® Duplex Clip for duplexing two simplex LC *OPTICAM*® Multimode or Singlemode Connectors.	Black	50	—

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PATENTED SC *OPTICAM*® Fiber Optic Connectors – Pre-Polished Cam Termination

- TIA/EIA-604 FOCIS-3 compliant connectors
- Exceed TIA/EIA-568-B.3 requirements
- Insertion loss: 0.3dB average (multimode and singlemode)
- Return loss: >20dB (multimode), >26dB (*10GIG*™ multimode), >50dB (singlemode)
- Quick installation; provide field termination in less than half the time of field polish connectors
- Patented re-termination capability provides yield rates approaching 100%
- Factory pre-polished fiber endface eliminates time-consuming field polishing to reduce installation costs, labor, scrap and the number of tools required
- Cam activated fiber and buffer clamp mechanisms provide superior fiber and buffer retention – less sensitivity to fiber tensile loading
- No separate clamps, tools, or steps are required to secure both the fiber and the buffer
- *OPTICAM*® Termination Tool simplifies tooling and termination, and virtually eliminates operator error by providing visual indication of proper termination after the cam step has been completed
- Cable retention boot assemblies consistently provide higher than industry standard cable retention
- Non-optical disconnect maintains data transmission under tensile loads for jacketed cable
- Fiber cable size: 900µm tight-buffered fiber with included boot(s); 1.6mm – 2.0mm and 3.0mm jacketed cable with available *OPTICAM*® 1.6mm/2.0mm and 3.0mm Cable Retention Boot Assemblies – ten per package
- For 250µm coated fiber termination, use 250 micron fiber build-up tube kit or fan-out kits on page C2.54
- Ferrule type: 2.5mm zirconia ceramic or polymer to meet a variety of application requirements
- Use *OPTICAM*® Termination Kit (FCAMKIT) on page C2.20



FSCDMCXAQ



FSCDMC6BL



FSCSCBU



FMCBT3BL-X



FSCCLIP-L

Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
SC *OPTICAM*® *10GIG*™ 50/125µm Multimode Fiber Optic Connectors				
FSCMCXAQ	SC *OPTICAM*® *10GIG*™ 50/125µm Multimode Simplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Aqua	1	10
FSCDMCXAQ	SC *OPTICAM*® *10GIG*™ 50/125µm Multimode Duplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Aqua	1	10
SC *OPTICAM*® 50/125µm Multimode Fiber Optic Connectors				
FSCMC5BL	SC *OPTICAM*® 50/125µm Multimode Simplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Black	1	10
FSCDMC5BL	SC *OPTICAM*® 50/125µm Multimode Duplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Black	1	10
SC *OPTICAM*® 62.5/125µm Multimode Fiber Optic Connectors				
FSCMC6BL	SC *OPTICAM*® 62.5/125µm Multimode Simplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Black	1	10
FSCDMC6BL	SC *OPTICAM*® 62.5/125µm Multimode Duplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Black	1	10
SC *OPTICAM*® Singlemode Fiber Optic Connectors				
FSCSCBU	SC *OPTICAM*® Singlemode Simplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Blue	1	10
***OPTICAM*® 1.6/2.0mm Cable Retention Boot Assemblies**				
FMCBT2AQ-X	*OPTICAM*® *10GIG*™ 1.6/2.0mm Cable Retention Boot.	Aqua	10	100
FMCBT2BL-X	*OPTICAM*® Multimode 1.6/2.0mm Cable Retention Boot.	Black	10	100
FSCBT2BU-X	*OPTICAM*® Singlemode 1.6/2.0mm Cable Retention Boot.	Blue	10	100
***OPTICAM*® 3.0mm Cable Retention Boot Assemblies**				
FMCBT3AQ-X	*OPTICAM*® *10GIG*™ 3.0mm Cable Retention Boot.	Aqua	10	100
FMCBT3BL-X	*OPTICAM*® Multimode 3.0mm Cable Retention Boot.	Black	10	100
FSCBT3BU-X	*OPTICAM*® Singlemode 3.0mm Cable Retention Boot.	Blue	10	100
SC Duplex Clip				
FSCCLIP-L	SC duplex clip for duplexing two simplex *PANDUIT* SC multimode or singlemode connectors.	Black	50	—

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PATENTED ST OPTICAM® Fiber Optic Connectors – Pre-Polished Cam Termination

- TIA/EIA-604 FOCIS-2 compliant connectors
- Exceed TIA/EIA-568-B.3 requirements
- Insertion loss: 0.3dB average (multimode and singlemode)
- Return loss: >20dB (multimode), >26dB (*10GIG*™ multimode), >50dB (singlemode)
- Quick installation; provide field termination in less than half the time of field polish connectors
- Patented re-termination capability provides yield rates approaching 100%
- Factory pre-polished fiber endface eliminates time-consuming field polishing to reduce installation costs, labor, scrap and the number of tools required
- Cam activated fiber and buffer clamp mechanisms provide superior fiber and buffer retention – less sensitivity to fiber tensile loading
- No separate clamps, tools, or steps are required to secure both the fiber and the buffer
- OPTICAM® Termination Tool simplifies tooling and termination, and virtually eliminates operator error by providing visual indication of proper termination after the cam step has been completed
- Cable retention boot assemblies consistently provide higher than industry standard cable retention
- Fiber cable size: 900µm tight-buffered fiber with included boot; 1.6mm – 2.0mm and 3.0mm jacketed cable with available OPTICAM® 1.6mm/2.0mm and 3.0mm Cable Retention Boot Assemblies – ten per package
- For 250µm coated fiber termination, use 250 micron fiber build-up tube kit or fan-out kits on page C2.54
- Ferrule type: 2.5mm zirconia ceramic or polymer to meet a variety of application requirements
- Use OPTICAM® Termination Kit (FCAMKIT) on page C2.20



FSTMCXAQ



FSTMC6BL



FSTSCBU



FSCBT2BU-X

Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
ST OPTICAM® 10GIG™ 50/125µm Multimode Fiber Optic Connectors				
FSTMCXAQ	ST OPTICAM® 10GIG™ 50/125µm Multimode Simplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Aqua	1	10
ST OPTICAM® 50/125µm Multimode Fiber Optic Connectors				
FSTMC5BL	ST OPTICAM® 50/125µm Multimode Simplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Black	1	10
ST OPTICAM® 62.5/125µm Multimode Fiber Optic Connectors				
FSTMC6BL	ST OPTICAM® 62.5/125µm Multimode Simplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Black	1	10
ST OPTICAM® Singlemode Fiber Optic Connectors				
FSTSCBU	ST OPTICAM® Singlemode Simplex Fiber Optic Connector for 900µm tight-buffered fiber installation.	Blue	1	10
OPTICAM® 1.6/2.0mm Cable Retention Boot Assemblies				
FMCBT2AQ-X	OPTICAM® 10GIG™ 1.6/2.0mm Cable Retention Boot.	Aqua	10	100
FMCBT2BL-X	OPTICAM® Multimode 1.6/2.0mm Cable Retention Boot.	Black	10	100
FSCBT2BU-X	OPTICAM® Singlemode 1.6/2.0mm Cable Retention Boot.	Blue	10	100
OPTICAM® 3.0mm Cable Retention Boot Assemblies				
FMCBT3AQ-X	OPTICAM® 10GIG™ 3.0mm Cable Retention Boot.	Aqua	10	100
FMCBT3BL-X	OPTICAM® Multimode 3.0mm Cable Retention Boot.	Black	10	100
FSCBT3BU-X	OPTICAM® Singlemode 3.0mm Cable Retention Boot.	Blue	10	100

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

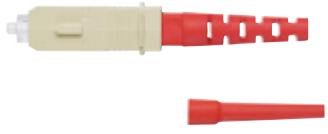
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SC *OPTI-CRIMP*® Fiber Optic Connectors – Pre-Polished Crimp Termination

- TIA/EIA-604 FOCIS-3 compliant connectors
- Exceed TIA/EIA-568-B.3 requirements
- Insertion loss: 0.3dB average (62.5/125µm), 0.35dB average (50/125µm)
- Return loss: >20dB
- Pre-polished mechanical crimp termination eliminates polishing and adhesive, reducing installation time by 50% over field polish SC connectors
- Non-optical disconnect maintains data transmission under tensile loads (jacketed cable only)
- Mechanical crimp cable retention consistently provides higher than industry standard cable retention
- Each simplex connector includes transparent inner housing assembly with pre-polished fiber stub, outer housing, crimp sleeve, one boot for 900µm tight-buffered fiber, one boot for 3mm jacketed cable and one dust cap
- Each duplex connector includes two transparent inner housing assemblies with pre-polished fiber stub, two outer housings, two crimp sleeves, two boots for 3mm jacketed cable, two dust caps and one duplex clip
- SC duplex clip available separately for duplexing two simplex *PANDUIT* SC multimode or singlemode connectors
- Fiber cable size: 900µm tight-buffered fiber, 3.0mm jacketed cable or 1.6mm – 2.0mm jacketed cable (noted in part description)
- For 250µm coated fiber termination, use 250 micron fiber build-up tube kit or fan-out kits on page C2.54
- Ferrule type: 2.5mm zirconia ceramic (highest durability for repeated matings)
- SC *OPTI-CRIMP*® Connectors and crimp tool allow visual verification of optimal continuity during crimp termination with the FVFLY visual fault locator and FVFLPCY patch cord (included in FJMVKITY termination kit)
- Use *OPTI-CRIMP*® Termination Kit (FJMVKITY) on page C2.21



FSCMMBL



FSCMMRD



FSCDMM



FSCCLIP-L

Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
SC *OPTI-CRIMP*® 62.5/125µm Multimode Fiber Optic Connectors				
FSCMMBL	SC *OPTI-CRIMP*® 62.5/125µm Multimode Simplex Fiber Optic Connector for 3.0mm jacketed cable or 900µm buffered fiber installation.	Black	1	10
FSCMMRD		Red	1	10
FSCMM2.0BL	SC *OPTI-CRIMP*® 62.5/125µm Multimode Simplex Fiber Optic Connector for 1.6mm – 2.0mm jacketed cable or 900µm buffered fiber installation.	Black	1	10
FSCMM2.0RD		Red	1	10
FSCDMM	SC *OPTI-CRIMP*® 62.5/125µm Multimode Duplex Fiber Optic Connector for 3.0mm jacketed cable installation.	Red & Black	1	10
SC *OPTI-CRIMP*® 50/125µm Multimode Fiber Optic Connectors				
FSCMM50BL	SC *OPTI-CRIMP*® 50/125µm Multimode Simplex Fiber Optic Connector for 3.0mm jacketed cable or 900µm buffered fiber installation.	Black	1	10
FSCMM50RD		Red	1	10
FSCMM502.0BL	SC *OPTI-CRIMP*® 50/125µm Multimode Simplex Fiber Optic Connector for 1.6mm – 2.0mm jacketed cable or 900µm buffered fiber installation.	Black	1	10
FSCMM502.0RD		Red	1	10
FSCDMM50	SC *OPTI-CRIMP*® 50/125µm Multimode Duplex Fiber Optic Connector for 3.0mm jacketed cable installation.	Red & Black	1	10
SC Duplex Clip				
FSCCLIP-L	SC duplex clip for duplexing two simplex *PANDUIT* SC multimode or singlemode connectors.	Black	50	—

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ST *OPTI-CRIMP*® Fiber Optic Connectors – Pre-Polished Crimp Termination

- TIA/EIA-604 FOCIS-2 compliant connectors
- Exceed TIA/EIA-568-B.3 requirements
- Insertion loss: 0.3dB average (62.5/125µm), 0.35dB average (50/125µm)
- Return loss: >20dB
- Pre-polished mechanical crimp termination eliminates polishing and adhesive, reducing installation time by 50% over field polish ST connectors
- Mechanical crimp cable retention consistently provides higher than industry standard cable retention
- Each connector includes connector body/ferrule assembly with pre-polished fiber stub, spring, bayonet, crimp sleeve, one boot for 900 µm tight-buffered fiber, one boot for 3mm jacketed cable and one dust cap
- Fiber cable size: 3.0mm jacketed cable or 900µm tight-buffered fiber
- For 250µm coated fiber termination, use 250 micron fiber build-up tube kit or fan-out kits on page C2.54
- Ferrule type: 2.5mm zirconia ceramic (highest durability for repeated matings)
- ST *OPTI-CRIMP*® Connectors and crimp tool allow visual verification of optimal continuity during crimp termination with the FVFLY visual fault locator and FVFLPCY patch cord (included in FJMVKITY termination kit)
- Use *OPTI-CRIMP*® Termination Kit (FJMVKITY) on page C2.21



FSTMMBL



FSTMMRD

Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
ST *OPTI-CRIMP*® 62.5/125µm Multimode Fiber Optic Connectors				
FSTMMBL	ST *OPTI-CRIMP*® 62.5/125µm Multimode Fiber Optic Connector.	Black	1	10
FSTMMRD		Red	1	10
ST *OPTI-CRIMP*® 50/125µm Multimode Fiber Optic Connectors				
FSTMM50BL	ST *OPTI-CRIMP*® 50/125µm Multimode Fiber Optic Connector.	Black	1	10
FSTMM50RD		Red	1	10

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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MINI-COM® FJ® *OPTI-CRIMP*® Duplex Jack Modules – Pre-Polished Crimp Termination

- TIA/EIA-604 FOCIS-6 compliant connectors
- Exceed TIA/EIA-568-B.3 requirements
- Insertion loss: 0.3dB average (62.5/125µm), 0.35dB average (50/125µm)
- Return loss: >20dB
- Pre-polished mechanical crimp termination eliminates polishing and adhesive, reducing installation time by 70% over field polish FJ® Jack Modules
- Non-optical disconnect maintains data transmission under tensile loads for jacketed cable
- Mechanical crimp cable retention consistently provides higher than industry standard cable retention
- RJ45 small form factor duplex jack module — double the port density in one module space
- *MINI-COM*® Jack Modules snap in and out of all *MINI-COM*® telecommunications room products and work area outlets
- Each duplex jack module includes housing, cover, two ferrule assemblies with pre-polished fiber stubs, two crimp sleeves, one boot for 900µm buffered fiber, one boot for 3mm jacketed cable and one dust cap
- Can be clearly identified with labels shown below, and icons on page B3.29
- Fiber cable size: 900µm tight-buffered fiber or 3.0mm jacketed cable
- For 250µm coated fiber termination, use 250 micron fiber build-up tube kit or fan-out kits on page C2.54
- Ferrule type: 2.5mm zirconia ceramic (highest durability for repeated matings)
- Corresponding FJ® Plugs found on page C2.16
- FJ® *OPTI-CRIMP*® Jack Modules and crimp tool allow visual verification of optimal continuity during crimp termination with the FVFLY visual fault locator and FVFLPCY patch cord (included in FJMVKITY termination kit)
- Use *OPTI-CRIMP*® Termination Kit (FJMVKITY) on page C2.21

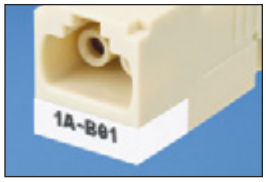


FJJSMM

Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
FJ® *OPTI-CRIMP*® 62.5/125µm Multimode Duplex Fiber Optic Jack Module					
FJJSMM5CEI	FJ® *OPTI-CRIMP*® 62.5/125µm Multimode Duplex Fiber Optic Jack Module with phosphor bronze split sleeves for 3.0mm jacketed cable or 900µm tight-buffered fiber installation.	1	Electric Ivory	1	10
FJ® *OPTI-CRIMP*® 50/125µm Multimode Duplex Fiber Optic Jack Module					
FJJSMM50CEI	FJ® *OPTI-CRIMP*® 50/125µm Multimode Duplex Fiber Optic Jack Module with phosphor bronze split sleeves for 3.0mm jacket cable or 900µm tight-buffered fiber installation.	1	Electric Ivory	1	10

‡For other colors replace suffix EI (Electric Ivory) with BL (Black), BU (Blue), IW (Off White) or AW (Arctic White).

Component Labels for *MINI-COM*® FJ® *OPTI-CRIMP*® Duplex Jack Modules – Pre-Polished Crimp Termination



Suggested Label Solutions for TIA/EIA 606-A Compliance				
Jack Module Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER*™ LS8E Hand-Held Printer Label**	***COUGAR*™ LS9 Hand-Held Printer Label**
All *MINI-COM*® Jack Modules	**C138X019FJJ**	**C138X019YPT**	**C138X019FJC**	**T019X000FJC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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MINI-COM® FJ® *OPTI-CRIMP*® Keyed Duplex Jack Modules – Pre-Polished Crimp Termination

- Include all of the same features as the FJ® *OPTI-CRIMP*® Jack Modules (listed on page C2.9) with the added benefit of visual and mechanical security
- Insertion loss: 0.3dB average (62.5/125µm), 0.35dB average (50/125µm)
- Return loss: >20dB (multimode)
- Mechanical keyed configurations prevent unintentional insertion into adjacent ports (4 versions)
- Color coded for easy identification
- For 250µm coated fiber termination, use 250 micron fiber build-up tube kit or fan-out kits on page C2.54
- Corresponding FJ® Keyed Plugs found on page C2.17
- FJ® *OPTI-CRIMP*® Keyed Jack Modules and crimp tool allow visual verification of optimal continuity during crimp termination with the FVFLY visual fault locator and FVFLPCY patch cord (included in FJMVKITY termination kit)
- Use *OPTI-CRIMP*® Termination Kit (FJMVKITY) on page C2.21



FJJSMM5CWBL



FJJSMM5CXRD



FJJSMM5CYOR

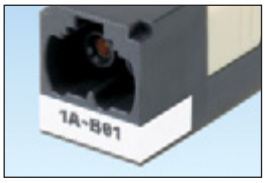


FJJSMM5CZYL

Part Number	Part Description	No. of Module Spaces	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
FJ® *OPTI-CRIMP*® Keyed 62.5/125µm Multimode Duplex Fiber Optic Jack Module					
FJJSMM5CWBL	FJ® *OPTI-CRIMP*® 62.5/125µm Keyed (W) Multimode Duplex Fiber Optic Jack Module with phosphor bronze split sleeves for 3.0mm jacket cable or 900µm tight-buffered fiber installation.	1	Black	1	10
FJJSMM5CXRD	FJ® *OPTI-CRIMP*® 62.5/125µm Keyed (X) Multimode Duplex Fiber Optic Jack Module with phosphor bronze split sleeves for 3.0mm jacket cable or 900µm tight-buffered fiber installation.	1	Red	1	10
FJJSMM5CYOR	FJ® *OPTI-CRIMP*® 62.5/125µm Keyed (Y) Multimode Duplex Fiber Optic Jack Module with phosphor bronze split sleeves for 3.0mm jacket cable or 900µm tight-buffered fiber installation.	1	Orange	1	10
FJJSMM5CZYL	FJ® *OPTI-CRIMP*® 62.5/125µm Keyed (Z) Multimode Duplex Fiber Optic Jack Module with phosphor bronze split sleeves for 3.0mm jacket cable or 900µm tight-buffered fiber installation.	1	Yellow	1	10
FJ® *OPTI-CRIMP*® Keyed 50/125µm Multimode Duplex Fiber Optic Jack Module					
FJJSMM50CWBL	FJ® *OPTI-CRIMP*® 50/125µm Keyed (W) Multimode Duplex Fiber Optic Jack Module with phosphor bronze split sleeves for 3.0mm jacket cable or 900µm tight-buffered fiber installation.	1	Black	1	10
FJJSMM50CXRD	FJ® *OPTI-CRIMP*® 50/125µm Keyed (X) Multimode Duplex Fiber Optic Jack Module with phosphor bronze split sleeves for 3.0mm jacket cable or 900µm tight-buffered fiber installation.	1	Red	1	10
FJJSMM50CYOR	FJ® *OPTI-CRIMP*® 50/125µm Keyed (Y) Multimode Duplex Fiber Optic Jack Module with phosphor bronze split sleeves for 3.0mm jacket cable or 900µm tight-buffered fiber installation.	1	Orange	1	10
FJJSMM50CZYL	FJ® *OPTI-CRIMP*® 50/125µm Keyed (Z) Multimode Duplex Fiber Optic Jack Module with phosphor bronze split sleeves for 3.0mm jacket cable or 900µm tight-buffered fiber installation.	1	Yellow	1	10

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Component Labels for *MINI-COM*® FJ® *OPTI-CRIMP*® Keyed Duplex Jack Modules – Pre-Polished Crimp Termination



Suggested Label Solutions for TIA/EIA 606-A Compliance				
Jack Module Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
All *MINI-COM*® Jack Modules	C138X019FJJ	C138X019YPT	C138X019FJC	T019X000FJC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Replacement Ferrule Assemblies for FJ® *OPTI-CRIMP*® Jack Modules

- Eliminate the need to purchase complete FJ® *OPTI-CRIMP*® Jack Modules or FJ® *OPTI-CRIMP*® Keyed Jack Modules if necessary to re-terminate
- Include ten ferrule assemblies, crimp sleeves, and dust caps for 3.0mm jacketed cable or 900µm tight-buffered fiber installation
- Dust caps are color coded: clear for 62.5/125µm and orange for 50/125µm



FJJSMM

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
FJJSMMFRL-X	Replacement ferrule assembly, crimp sleeve, and clear dust cap for FJ® *OPTI-CRIMP*® 62.5/125µm Multimode Duplex Jack Module for 3.0mm jacketed cable or 900µm tight-buffered fiber installation.	10	50
FJJSMM50FRL-X	Replacement ferrule assembly, crimp sleeve, and orange dust cap for FJ® *OPTI-CRIMP*® 50/125µm Multimode Duplex Jack Module for 3.0mm jacketed cable or 900µm tight-buffered fiber installation.	10	50

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LC Fiber Optic Connectors – Field Polish Termination

- TIA/EIA-604 FOCIS-10 compatible connectors
- Exceed TIA/EIA-568-B.3 requirements
- Insertion loss: 0.10dB average (multimode and singlemode)
- Return loss: >20dB (multimode), >40dB (singlemode)
- Non-optical disconnect maintains data transmission under tensile loads for jacketed cable
- Each simplex connector includes connector body/ferrule assembly, crimp sleeve, one boot for 900µm buffered fiber, one boot for 1.6mm – 2.0mm jacketed cable and one dust cap
- Each duplex connector includes two connector body/ferrule assemblies, two crimp sleeves, two boots for 1.6mm – 2.0mm jacketed cable or two boots for 900µm buffered fiber, two dust caps and one duplex clip
- LC duplex clip available separately for duplexing two simplex *PANDUIT* LC Connectors
- Fiber cable type: tight-buffered recommended
- Fiber cable size: 1.6mm – 2.0mm jacketed cable or 900µm buffered fiber (noted in part description)
- For 250µm coated fiber termination, use 250 micron fiber build-up tube kit or fan-out kits on page C2.54
- Ferrule type: 1.25mm zirconia ceramic (highest durability for repeated matings)
- Field polish termination – *PANDUIT* recommends anaerobic adhesive on page C2.23
- Use field polish termination kit (FIELDKIT) on page C2.22



FLCSMEIY



FLCDMEIY



FLCSSBUY



FLCDSBUY



FLCCLIP-L

Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
LC Multimode Fiber Optic Connectors				
FLCSMEIY	LC multimode simplex fiber optic connector for 1.6mm – 2.0mm jacketed cable or 900µm buffered fiber installation.	Electric Ivory	1	10
FLCDMEIY	LC multimode duplex fiber optic connector for 1.6mm – 2.0mm jacketed cable installation.	Electric Ivory	1	10
FLCDM900EIY	LC multimode duplex fiber optic connector for 900µm buffered fiber installation.	Electric Ivory	1	10
LC Singlemode Fiber Optic Connectors				
FLCSSBUY	LC singlemode simplex fiber optic connector for 1.6mm – 2.0mm jacketed cable or 900µm buffered fiber installation.	Blue	1	10
FLCDSBUY	LC singlemode duplex fiber optic connector for 1.6mm – 2.0mm jacketed cable installation.	Blue	1	10
FLCDS900BUY	LC singlemode duplex fiber optic connector for 900µm buffered fiber installation.	Blue	1	10
LC Duplex Clip				
FLCCLIP-L	LC duplex clip for duplexing two simplex *PANDUIT* LC field polish multimode or singlemode connectors.	White	50	—

To comply with industry standards the connector housing and boots are blue for all singlemode connectors, and electric ivory for all multimode connectors.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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SC Fiber Optic Connectors – Field Polish Termination

- TIA/EIA-604 FOCIS-3 compliant connectors
- Exceed TIA/EIA-568-B.3 requirements
- Insertion loss: 0.10dB average (multimode), 0.15dB average (singlemode)
- Return loss: >20dB (multimode), >40dB (singlemode)
- Non-optical disconnect maintains data transmission under tensile loads for jacketed cable
- Free floating housing ensures complete latching even when inserted by the boot, beneficial in high density spacing applications
- Pre-assembled inner housing simplifies assembly
- Each simplex connector includes inner housing assembly, outer housing, crimp sleeve, one boot for 900µm buffered fiber, one boot for 3mm jacketed cable and one dust cap
- Each duplex connector includes two inner housing assemblies, two outer housings, two crimp sleeves, two boots for 3mm jacketed cable, two dust caps and one duplex clip
- SC duplex clip available separately for duplexing two simplex *PANDUIT* SC Connectors
- Fiber cable type: tight-buffered recommended
- Fiber cable size: 900µm buffered fiber, 3mm jacketed cable or 1.6mm – 2.0mm jacketed cable (noted in part description)
- For 250µm coated fiber termination, use 250 micron fiber build-up tube kit or fan-out kits on page C2.54
- Ferrule type: 2.5mm zirconia ceramic (highest durability for repeated matings)
- Field polish termination – *PANDUIT* recommends anaerobic adhesive on page C2.23
- Use field polish termination kit (FIELDKIT) on page C2.22



FSCMBL



FSCMRD



FSCDM



FSCSBU



FSCCLIP-L

Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
SC Multimode Fiber Optic Connectors				
FSCMBL	SC multimode simplex fiber optic connector for 3.0mm jacketed cable or 900µm buffered fiber installation.	Black	1	10
FSCMRD		Red	1	10
FSCM2.0BL	SC multimode simplex fiber optic connector for 1.6mm – 2.0mm jacketed cable or 900µm buffered fiber installation.	Black	1	10
FSCM2.0RD		Red	1	10
FSCDM	SC multimode duplex fiber optic connector for 3.0mm jacketed cable installation.	Red & Black	1	10
SC Singlemode Fiber Optic Connectors				
FSCSBU	SC singlemode simplex fiber optic connector for 3.0mm jacketed cable or 900µm buffered fiber installation.	Blue	1	10
FSCS2.0BU	SC singlemode simplex fiber optic connector for 1.6mm – 2.0mm jacketed cable or 900µm buffered fiber installation.	Blue	1	10
SC Duplex Clip				
FSCCLIP-L	SC duplex clip for duplexing two simplex *PANDUIT* SC multimode or singlemode connectors.	Black	50	—

To comply with industry standards the connector housing is blue for all singlemode connectors, and electric ivory for all multimode connectors.

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ST Fiber Optic Connectors – Field Polish Termination

- TIA/EIA-604 FOCIS-2 compatible connectors
- Exceed TIA/EIA-568-B.3 requirements
- Insertion loss: 0.15dB average (multimode), 0.20dB average (singlemode)
- Return loss: >20dB (multimode), >40dB (singlemode)
- Each connector includes metal connector body/ferrule assembly, spring, metal bayonet, crimp sleeve, one boot for 900µm buffered fiber, one boot for 3mm jacketed cable and one dust cap
- Fiber cable type: tight-buffered recommended
- Fiber cable size: 3.0mm jacketed cable or 900µm buffered fiber
- For 250µm coated fiber termination, use 250 micron fiber build-up tube kit or fan-out kits on page C2.54
- Ferrule type: 2.5mm zirconia ceramic (highest durability for repeated matings)
- Field polish termination – *PANDUIT* recommends anaerobic adhesive on page C2.23
- Use field polish termination kit (FIELDKIT) on page C2.22



FSTMABL

FSTMARD

FSTSABU

Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
ST Multimode Fiber Optic Connectors				
FSTMABL	ST multimode simplex fiber optic connector for 3.0mm jacketed cable or 900µm buffered fiber installation.	Black	1	10
FSTMARD		Red	1	10
ST Singlemode Fiber Optic Connector				
FSTSABU	ST singlemode simplex fiber optic connector for 3.0mm jacketed cable or 900µm buffered fiber installation.	Blue	1	10

MINI-COM® FJ® Duplex Jack Modules – Field Polish Termination

- TIA/EIA-604 FOCIS-6 compliant connectors
- Exceed TIA/EIA-568-B.3 requirements
- Insertion loss: 0.1dB average (multimode), 0.2dB average (singlemode)
- Return loss: >20dB (multimode), >40dB (singlemode)
- RJ45 small form factor duplex jack module – double the port density in one module space
- Non-optical disconnect maintains data transmission under tensile loads for jacketed cable
- *MINI-COM*® Jack Modules snap in and out of all *MINI-COM*® telecommunications room products and work area outlets
- Each duplex jack module includes housing, cover, two ferrule assemblies, two crimp sleeves, one boot for 900µm buffered fiber, one boot for 3mm jacketed cable and one dust cap
- Can be clearly identified with labels below and icons on page B3.29
- Fiber cable type: tight-buffered recommended
- Fiber cable size: 900µm buffered fiber, 3.0mm jacketed cable or 1.6mm – 2.0mm jacketed cable (noted in part description)
- For 250µm coated fiber termination, use 250 micron fiber build-up tube kit or fan-out kits on page C2.54
- Ferrule type: 2.5mm zirconia ceramic (highest durability for repeated matings)
- Corresponding FJ® Plugs found on page C2.16
- Field polish termination – *PANDUIT* recommends anaerobic adhesive on page C2.23
- Use field polish termination kit (FIELDKIT) on page C2.22



FJJGM5C



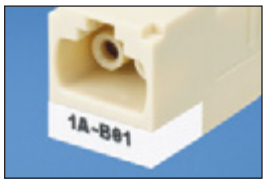
FJJGS9C

Part Number	Part Description	No. of Module Spaces	Color‡	Std. Pkg. Qty.	Std. Ctn. Qty.
FJ® Multimode Duplex Fiber Optic Jack Modules					
FJJGM5CEI	FJ® Multimode Duplex Fiber Optic Jack Module with phosphor bronze split sleeves for 3.0mm jacketed cable or 900µm buffered fiber installation.	1	Electric Ivory	1	10
FJJGM2.0CEI	FJ® Multimode Duplex Fiber Optic Jack Module with phosphor bronze split sleeves for 1.6mm – 2.0mm jacketed cable or 900µm buffered fiber installation.	1	Electric Ivory	1	10
FJ® Singlemode Duplex Fiber Optic Jack Modules					
FJJGS9CBU	FJ® Singlemode Duplex Fiber Optic Jack Module with zirconia ceramic split sleeves for 3.0mm jacketed cable or 900µm buffered fiber installation.	1	Blue	1	10
FJJGS2.0CBU	FJ® Singlemode Duplex Fiber Optic Jack Module with zirconia ceramic split sleeves for 1.6mm – 2.0mm jacketed cable or 900µm buffered fiber installation.	1	Blue	1	10

To comply with industry standards, the housing, cover, and boots are blue for singlemode jack modules and electric ivory for multimode jack modules.
‡For other colors replace suffix EI (Electric Ivory) or BU (Blue) with BL (Black), IW (Off White), or AW (Arctic White).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Component Labels for *MINI-COM*® FJ® Duplex Jack Modules – Field Polish Termination



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Jack Module Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
All *MINI-COM*® Jack Modules	C138X019FJJ	C138X019YPT	C138X019FJC	—

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

MINI-COM® FJ® Keyed Duplex Jack Modules – Field Polish Termination

- Include all of the same features as the FJ® Jack Modules (listed on page C2.14) with the added benefit of visual and mechanical security
- Insertion loss: 0.1dB average (multimode)
- Return loss: >20dB (multimode)
- Mechanical keyed configurations prevent unintentional insertion into adjacent ports (four versions)
- Color coded for easy identification
- For 250µm coated fiber termination, use 250 micron fiber build-up tube kit or fan-out kits on page C2.54
- Corresponding FJ® Keyed Plugs found on page C2.17
- Field polish termination – *PANDUIT* recommends anaerobic adhesive on page C2.23
- Use field polish termination kit (FIELDKIT) on page C2.22


FJJGM5CWBL


FJJGM5CXRD


FJJGM5CYOR


FJJGM5CZYL

Part Number	Part Description	No. of Module Spaces	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
FJJGM5CWBL	FJ® Keyed (W) Multimode Duplex Fiber Optic Jack Module with phosphor bronze split sleeves for 3.0mm jacketed cable or 900µm buffered fiber installation.	1	Black	1	10
FJJGM5CXRD	FJ® Keyed (X) Multimode Duplex Fiber Optic Jack Module with phosphor bronze split sleeves for 3.0mm jacketed cable or 900µm buffered fiber installation.	1	Red	1	10
FJJGM5CYOR	FJ® Keyed (Y) Multimode Duplex Fiber Optic Jack Module with phosphor bronze split sleeves for 3.0mm jacketed cable or 900µm buffered fiber installation.	1	Orange	1	10
FJJGM5CZYL	FJ® Keyed (Z) Multimode Duplex Fiber Optic Jack Module with phosphor bronze split sleeves for 3.0mm jacketed cable or 900µm buffered fiber installation.	1	Yellow	1	10

Component Labels for *MINI-COM*® FJ® Keyed Duplex Jack Modules – Field Polish Termination



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Jack Module Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
All *MINI-COM*® Jack Modules	C138X019FJJ	C138X019YPT	C138X019FJC	—

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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Replacement Ferrule Assemblies for FJ® Field Polish Jack Modules

- Eliminate the need to purchase complete FJ® Field Polish Jack Modules or FJ® Field Polish Keyed Jack Modules if necessary to re-terminate
- Include ten ferrule assemblies, crimp sleeves, and dust caps for 3.0mm jacketed cable or 900µm tight-buffered fiber installation



FJJ

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
FJJFRL-X	Replacement ferrule assembly, crimp sleeve, and dust cap for FJ® Field Polish Multimode Duplex Jack Module for 3.0mm jacketed cable or 900µm tight-buffered fibre installation.	10	50
FJJ9FRL-X	Replacement ferrule assembly, crimp sleeve, and dust cap for FJ® Field Polish Singlemode Duplex Jack Module for 3.0mm jacketed cable or 900µm tight-buffered fibre installation.	10	50

FJ® Duplex Fiber Optic Plugs – Field Polish Termination

- TIA/EIA-604 FOCIS-6 compliant connectors
- Exceed TIA/EIA-568-B.3 requirements
- Insertion loss: 0.1dB average (multimode), 0.2dB average (singlemode)
- Return loss: >20dB (multimode), >40dB (singlemode)
- RJ45 small form factor duplex plug
- Non-optical disconnect maintains data transmission under tensile loads
- Each duplex plug includes housing, insert, two ferrule assemblies, two crimp sleeves, one boot for 3mm jacketed cable and two dust caps
- Fiber cable type: tight-buffered recommended
- Fiber cable size: 3.0mm jacketed cable or 1.6mm – 2.0mm jacketed cable (noted in part description)
- Ferrule type: 2.5mm zirconia ceramic (highest durability for repeated matings)
- Corresponding FJ® *OPTI-CRIMP*® Jack Modules found on page C2.9 and FJ® Field Polish Jack Modules found on page C2.14
- Field polish termination – *PANDUIT* recommends anaerobic adhesive on page C2.23
- Use field polish termination kit (FIELDKIT) on page C2.22



FJEPGM5CEI



FJEPGS9CBUY



FJGCCEI

Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
FJ® Multimode Duplex Fiber Optic Plugs				
FJEPGM5CEI	FJ® Multimode Duplex Fiber Optic Plug for 3mm jacketed cable installation.	Electric Ivory	1	10
FJEPGM2.0CEI	FJ® Multimode Duplex Fiber Optic Plug for 1.6mm – 2.0mm jacketed cable installation.	Electric Ivory	1	10
FJ® Singlemode Duplex Fiber Optic Plugs				
FJEPGS9CBUY	FJ® Singlemode Duplex Fiber Optic Plug for 3mm jacketed cable installation.	Blue	1	10
FJEPGS2.0CBUY	FJ® Singlemode Duplex Fiber Optic Plug for 1.6mm – 2.0mm jacketed cable installation.	Blue	1	10
FJ® Plug-to-Plug Adapter				
FJGCCEI	Adapter to mate two FJ® Duplex Fiber Optic Multimode or Singlemode Plugs. Used for the calibration of test cables and equipment and for FJ® Plug-to-Plug cross connects. Includes two dust caps. (Not for use in *MINI-COM*® Surface Mount Boxes.)	Electric Ivory	1	10

To comply with industry standards, the housing, insert and boot are blue for singlemode plugs and electric ivory for multimode plugs.

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FJ® Keyed Duplex Fiber Optic Plugs – Field Polish Termination

- Include all of the same features as the FJ® Plugs (listed on page C2.16) with the added benefit of visual and mechanical security
- Insertion loss: 0.1dB average (multimode)
- Return loss: >20dB (multimode)
- Mechanical keyed configurations prevent unintentional insertion into adjacent ports (four versions)
- Color coded for easy identification
- Universal keyed plug available
- Corresponding FJ® *OPTI-CRIMP*® Keyed Jack Modules found on page C2.10 and FJ® Field Polish Keyed Jack Modules found on page C2.15
- Field polish termination – *PANDUIT* recommends anaerobic adhesive on page C2.23
- Use field polish termination kit (FIELDKIT) on page C2.22



FJEPGM5CWBL



FJEPGM5CXRD



FJEPGM5CYOR



FJEPGM5CZYL

Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
FJEPGM5CWBL	FJ® Keyed (W) Multimode Duplex Fiber Optic Plug for 3mm jacketed cable installation.	Black	1	10
FJEPGM5CXRD	FJ® Keyed (X) Multimode Duplex Fiber Optic Plug for 3mm jacketed cable installation.	Red	1	10
FJEPGM5CYOR	FJ® Keyed (Y) Multimode Duplex Fiber Optic Plug for 3mm jacketed cable installation.	Orange	1	10
FJEPGM5CZYL	FJ® Keyed (Z) Multimode Duplex Fiber Optic Plug for 3mm jacketed cable installation.	Yellow	1	10
FJEPGM5CQWH	FJ® Universal Keyed (Q) Multimode Duplex Fiber Optic Plug for 3mm jacketed cable installation.	White	1	10

Replacement Ferrule Assemblies for FJ® Field Polish Plugs

- Eliminate the need to purchase complete FJ® Field Polish Plugs or FJ® Field Polish Keyed Plugs if necessary to re-terminate
- Include ten ferrule assemblies, crimp sleeves, and dust caps for 3.0mm jacketed cable installation
- Ferrule housing molded in blue for singlemode and electric ivory for multimode per industry standard



FJEPFRL-X



FJEP9FRL-XY

Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
FJEPFRL-X	Replacement ferrule assembly, crimp sleeve, and dust cap for multimode FJ® Field Polish Duplex Plug for 3.0mm jacketed cable installation.	Electric Ivory	10	50
FJEP9FRL-XY	Replacement ferrule assembly, crimp sleeve, and dust cap for singlemode FJ® Field Polish Duplex Plug for 3.0mm jacketed cable installation.	Blue	10	50

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LC Sr./Sr. Fiber Optic Adapters

- TIA/EIA-604 FOCIS-10 compatible adapters
- Exceed TIA/EIA-568-B.3 requirements
- Mini duplex adapter design fits into simplex SC adapter opening
- Sr./Sr. (Senior/Senior) adapters have a FOCIS-10 senior adapter interface at each end
- Accept FOCIS-10 compatible senior LC connectors
- Choice of phosphor bronze or zirconia ceramic split sleeves to fit specific network requirements; zirconia ceramic split sleeves are required for singlemode applications
- LC simplex and duplex adapters are also available in *OPTICOM®* Fiber Adapter Panels on page C2.31 and in *QUICKNET™* Pre-Terminated Cassettes on page C2.33 to provide a complete LC system solution
- LC duplex adapters are also available in *MINI-COM®* Modules on page B2.14



FADSLCEI-L



FADSLCAQ-L



FASSLCZBU-L

Part Number	Part Description	Adapter Color	Std. Pkg. Qty.	Std. Ctn. Qty.
LC Sr./Sr. Multimode Fiber Optic Adapters				
FADSLCEI-L	LC Sr./Sr. SFF duplex multimode fiber optic adapter with phosphor bronze split sleeves.	Electric Ivory	50	100
LC Sr./Sr. *10GIG™* Multimode Fiber Optic Adapters				
FASSLCZAQ-L	LC Sr./Sr. *10GIG™* SFF Simplex Multimode Fiber Optic Adapter with zirconia ceramic split sleeve.	Aqua	50	100
FADSLCAQ-L	LC Sr./Sr. *10GIG™* SFF Duplex Multimode Fiber Optic Adapter with phosphor bronze split sleeves.	Aqua	50	100
FADSLCZAQ-L	LC Sr./Sr. *10GIG™* SFF Duplex Multimode Fiber Optic Adapter with zirconia ceramic split sleeves.	Aqua	50	100
LC Sr./Sr. Singlemode Fiber Optic Adapters				
FASSLCZBU-L	LC Sr./Sr. SFF simplex singlemode fiber optic adapter with zirconia ceramic split sleeve.	Blue	50	100
FADSLCZBU-L	LC Sr./Sr. SFF duplex singlemode fiber optic adapter with zirconia ceramic split sleeves.	Blue	50	100

LC Sr./Jr. Fiber Optic Adapters

- TIA/EIA-604 FOCIS-10 compatible adapters
- Exceed TIA/EIA-568-B.3 requirements
- Mini duplex adapter design fits into simplex SC adapter opening
- Sr./Jr. (Senior/Junior) adapters have a FOCIS-10 senior adapter interface at one end and a FOCIS-10 junior adapter interface at the other end
- Both ends accept FOCIS-10 compatible senior LC connectors
- Junior end also accepts FOCIS-10 compatible junior (fixed ferrule/springless) LC connectors
- Accommodate tighter applications (inside wall); allowing easier access to LC connectors terminated on 900µm buffered fiber
- Choice of phosphor bronze or zirconia ceramic split sleeves to fit specific network requirements; zirconia ceramic split sleeves are required for singlemode applications
- LC simplex and duplex adapters are also available in *OPTICOM®* Fiber Adapter Panels on page C2.31 and in *QUICKNET™* Pre-Terminated Cassettes on page C2.33 to provide a complete LC system solution
- LC duplex adapters are also available in *MINI-COM®* Modules on page B2.15



FADJLCEI-L



FADJLCAQ-L



FASJLCZBU-L

Part Number	Part Description	Adapter Color	Std. Pkg. Qty.	Std. Ctn. Qty.
LC Sr./Jr. Multimode Fiber Optic Adapters				
FADJLCEI-L	LC Sr./Jr. SFF duplex multimode fiber optic adapter with phosphor bronze split sleeves.	Electric Ivory	50	100
LC Sr./Jr. *10GIG™* Multimode Fiber Optic Adapters				
FASJLCZAQ-L	LC Sr./Jr. *10GIG™* SFF Simplex Multimode Fiber Optic Adapter with zirconia ceramic split sleeves.	Aqua	50	100
FADJLCAQ-L	LC Sr./Jr. *10GIG™* SFF Duplex Multimode Fiber Optic Adapter with phosphor bronze split sleeves.	Aqua	50	100
FADJLCZAQ-L	LC Sr./Jr. *10GIG™* SFF Duplex Multimode Fiber Optic Adapter with zirconia ceramic split sleeves.	Aqua	50	100
LC Sr./Jr. Singlemode Fiber Optic Adapters				
FASJLCZBU-L	LC Sr./Jr. SFF simplex singlemode fiber optic adapter with zirconia ceramic split sleeve.	Blue	50	100
FADJLCZBU-L	LC Sr./Jr. SFF duplex singlemode fiber optic adapter with zirconia ceramic split sleeves.	Blue	50	100

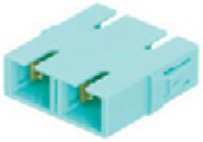
Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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SC Fiber Optic Adapters

- TIA/EIA-604 FOCIS-3 compliant adapters
- Exceed TIA/EIA-568-B.3 requirements
- Integrated retention clip automatically adjusts for FOCIS-3 compliant panel thickness variations, creating a snug fit to reduce rattles; no metal clips to become bent or damaged
- Improved protective cap fully surrounds split sleeve opening
- Choice of phosphor bronze or zirconia ceramic split sleeves to fit specific network requirements; zirconia ceramic split sleeves are required for singlemode applications
- Short flange design for improved modularity and higher density usage
- Q.C. number and split sleeve material laser marked on every adapter assures 100% traceability and quick and easy identification of split sleeve material
- SC simplex and duplex adapters are also available in *OPTICOM®* Fiber Adapter Panels on page C2.31,C2.32 and in *QUICKNET™* Pre-Terminated Cassettes on page C2.33 to provide a complete SC system solution
- SC simplex and duplex adapters are also available in *MINI-COM®* Modules on page B2.16



FADSCEI-L



FADSCAQ-L



FASSCZBU-L



FASSCZAG-L

Part Number	Part Description	Adapter Color	Std. Pkg. Qty.	Std. Ctn. Qty.
SC Multimode Fiber Optic Adapters				
FASSCEI-L	SC simplex multimode fiber optic adapter with phosphor bronze split sleeve.	Electric Ivory	50	100
FADSCEI-L	SC duplex multimode fiber optic adapter with phosphor bronze split sleeves.	Electric Ivory	50	100
SC *10GIG*™ Multimode Fiber Optic Adapters				
FASSCAQ-L	SC *10GIG*™ Simplex Multimode Fiber Optic Adapter with phosphor bronze split sleeve.	Aqua	50	100
FASSCZAQ-L	SC *10GIG*™ Simplex Multimode Fiber Optic Adapter with zirconia ceramic split sleeve.	Aqua	50	100
FADSCAQ-L	SC *10GIG*™ Duplex Multimode Fiber Optic Adapter with phosphor bronze split sleeves.	Aqua	50	100
FADSCZAQ-L	SC *10GIG*™ Duplex Multimode Fiber Optic Adapter with zirconia ceramic split sleeves.	Aqua	50	100
SC Singlemode Fiber Optic Adapters				
FASSCZBU-L	SC simplex singlemode fiber optic adapter with zirconia ceramic split sleeve.	Blue	50	100
FADSCZBU-L	SC duplex singlemode fiber optic adapter with zirconia ceramic split sleeves.	Blue	50	100
SC APC Singlemode Fiber Optic Adapters				
FASSCZAG-L	SC APC simplex singlemode fiber optic adapter with zirconia ceramic split sleeve.	Green	50	100
FADSCZAG-L	SC APC duplex singlemode fiber optic adapter with zirconia ceramic split sleeves.	Green	50	100

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OPTICAM® Pre-Polished Cam Fiber Optic Termination Kits

- For termination of all *PANDUIT® OPTICAM®* Pre-Polished Connectors
- *OPTICAM®* Termination Tool simplifies tooling and termination, and virtually eliminates operator error by providing visual indication of proper termination after the cam step has been completed
- No adhesive or electricity required for termination
- Include installation instructions and stripping templates for all *PANDUIT® OPTICAM®* Pre-Polished Connectors; also available on www.panduit.com



FCAMKIT

Part Number	Part Description	Std. Pkg. Qty.
OPTICAM® Pre-Polished Cam Termination Kit		
FCAMKIT	Tools, consumables, installation instructions and stripping templates necessary for termination of all *PANDUIT® OPTICAM®* Pre-Polished Cam Connectors.	1
OPTICAM® Conversion Kit – Converts OPTI-CRIMP® Termination Kit for OPTICAM® Termination		
FPPKIT-CVY	Converts *OPTI-CRIMP®* Termination Kits with the additional tools, installation instructions, and stripping templates required for termination of all *PANDUIT® OPTICAM®* Pre-Polished Cam Connectors; includes *OPTICAM®* Termination Tool and cradles, and FVFLPC-2.5SMY and FVFLPC-1.25SMY Patch Cords.	1
Cleaning Consumables Kit		
FCLEANKIT	Replenishes the cleaning consumables required for termination of all fiber optic connectors; includes all of the same cleaning consumable items that are included in all *PANDUIT* termination kits.	1
Field Polish Kit Upgrade for OPTICAM® Connector Termination		
FIELDKITUPG	Upgrades FIELDKIT with the additional tools, consumables, installation instructions and stripping templates required for termination of all *PANDUIT® OPTICAM®* Pre-Polished Cam Connectors.	1

For field polish termination kits, see page B2.22.

Components for OPTICAM® Pre-Polished Cam Termination Kits



OCTT



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
Tools (included in FCAMKIT)			
FKITCASE	Case for fiber termination kits.	1	—
CST115	Fiber cable jacket stripper.	1	—
FALC	Alcohol bottle (empty).	1	10
FBFSP	Fiber buffer stripper.	1	10
FSCDVR	Screwdriver.	1	50
FGLS	Safety glasses.	1	10
FTWZR	Tweezers.	1	10
FWBTL	Water bottle (empty).	1	10
FKS	Fiber Kevlar shears.	1	10
FWRKMAT	Fiber safe workmat.	1	10
Tools (included in FCAMKIT and FIELDKITUPG)			
FJQCVR	Fiber cleaver tool.	1	10
OCTT	*OPTICAM®* Termination Tool; includes batteries, pouch and two cradles for each *OPTICAM®* Connector – LC, SC and ST (patch cords available separately).	1	—
FVFLPC-2.5SMY	Patch cord for all *OPTICAM®* 2.5mm ferrule connectors (SC and ST).	1	10
FVFLPC-1.25SMY	Patch cord for all *OPTICAM®* 1.25mm ferrule connectors (LC).	1	10
Cleaning Consumables (included in FCAMKIT and FCLEANKIT)			
FWP-C	Lint-free wipes.	100	1000
FSWB-C	Cleaning swabs.	100	1000
FSTY	Safety stickers for fiber scraps.	1	10
PFX-0	Permanent marking pen, fine tip, black ink (one included in each kit).	12	144
Replacement Parts			
FJQCVRB	Replacement blade for FJQCVR.	1	10
FSCC	Tool cradles for SC *OPTICAM®* Connectors (two per package).	1	—
FLCC	Tool cradles for LC *OPTICAM®* Connectors (two per package).	1	—
FSTC	Tool cradles for ST *OPTICAM®* Connectors (two per package).	1	—

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OPTI-CRIMP® Pre-Polished Crimp Fiber Optic Termination Kits

- For termination of all *PANDUIT*® *OPTI-CRIMP*® Pre-Polished Crimp Connectors
- Includes FVFLY visual fault locator and FVFLPCY patch cord for visual verification of optimal continuity between the field fiber and the pre-polished fiber stub during crimp termination
- No adhesive required for termination
- Includes installation instructions and stripping templates for all *PANDUIT*® *OPTI-CRIMP*® Pre-Polished Crimp Connectors and FJ® *OPTI-CRIMP*® Pre-Polished Crimp Jack Modules; also available on www.panduit.com



FJMVKITY

Part Number	Part Description	Std. Pkg. Qty.
OPTI-CRIMP® Pre-Polished Crimp Termination Kit		
FJMVKITY	Tools, consumables, installation instructions and stripping templates necessary for termination of SC, ST, and FJ® *OPTI-CRIMP*® Pre-Polished Crimp Multimode Connectors and Jack Modules onto 3mm jacketed cable and 900µm tight-buffered fiber.	1
Cleaning Consumables Kit		
FCLEANKIT	Replenishes the cleaning consumables required for termination of all fiber optic connectors; includes all of the same cleaning consumable items that are included in all *PANDUIT* termination kits.	1

For *OPTICAM*® Pre-Polished Cam Termination Kits, see page C2.20.

Components for *OPTI-CRIMP*® Pre-Polished Crimp Termination Kits



FVFLY and FVFLPCY

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
Tools (included in FJMVKITY)			
FKITCASE	Case for fiber termination kits.	1	—
CST115	Fiber cable jacket stripper.	1	—
FALC	Alcohol bottle (empty).	1	10
FBFSP	Fiber buffer stripper.	1	10
FSCDVR	Screwdriver.	1	50
FGLS	Safety glasses.	1	10
FTWZR	Tweezers.	1	10
FWBTL	Water bottle (empty).	1	10
FKS	Fiber Kevlar shears.	1	10
FWRKMAT	Fiber safe workmat.	1	10
FJQCVR	Fiber cleaver tool.	1	10
FCRP5	Crimp tool (hex sizes: .048", .100", .128", .151", .190").	1	—
FVFLY	Visual fault locator (includes batteries and instructions).	1	—
FVFLPCY	Patch cord for all *OPTI-CRIMP*® Connectors (1m long).	1	10
Cleaning Consumables (included in FJMVKITY and FCLEANKIT)			
FWP-C	Lint-free wipes.	100	1000
FSWB-C	Cleaning swabs.	100	1000
FSTY	Safety stickers for fiber scraps.	1	10
PFX-0	Permanent marking pen, fine tip, black ink (one included in each kit).	12	144
Replacement Parts			
FJQCVRB	Replacement blade for FJQCVR.	1	10
CD-FCRP5	Die set for FCRP5 tool.	1	—
Additional Tools Required for Terminating SC *OPTI-CRIMP*® Connectors onto 1.6mm – 2.0mm Jacketed Cable (Select only one Heat Shrink Curing Tool)			
FLPT	Crimp tool required for 1.6mm/2.0mm jacketed cable termination.	1	—
FHSCT	Heat shrink curing tool (110 VAC, 60 Hz) required for 1.6mm/2.0mm jacketed cable termination (included in FIELDKIT and FCAMKITUPG).	1	—
FHSCT-W	Heat shrink curing tool (230 VAC, 50 Hz) required for 1.6mm/2.0mm jacketed cable termination (included in FIELDKIT-G and FCAMKITUPG-G).	1	—

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Field Polish Fiber Optic Termination Kits

- For termination of all *PANDUIT* field polish connectors
- Fast acting adhesive; no long curing epoxy required for termination
- Kit provides consumables for terminating up to 200 field polish connectors
- Include installation instructions and stripping templates for all *PANDUIT* field polish connectors; also available on www.panduit.com



FIELDKIT

Part Number	Part Description	Std. Pkg. Qty.
Field Polish Termination Kits		
FIELDKIT	Tools, consumables, installation instructions and stripping templates necessary for termination of all *PANDUIT* field polish connectors; includes FHSCT heat shrink curing tool – 110 VAC, 60 Hz.	1
FIELDKIT-G	Tools, consumables, installation instructions and stripping templates necessary for termination of all *PANDUIT* field polish connectors; includes FHSCT-W heat shrink curing tool – 230 VAC, 50 Hz.	1
Field Polish Consumables Refurbishment Kit		
FIELDKITRFB	Replenishes the field polish consumables required for termination of all field polish connectors; includes all of the same consumable items as the FIELDKIT or FIELDKIT-G field polish termination kit.	1
Cleaning Consumables Kit		
FCLEANKIT	Replenishes the cleaning consumables required for termination of all fiber optic connectors; includes all of the same cleaning consumable items that are included in all *PANDUIT* termination kits.	1
***OPTICAM*® Kit Upgrade for Field Polish Connector Termination**		
FCAMKITUPG	Upgrades FCAMKIT with the additional tools, consumables, installation instructions and stripping templates required for termination of all *PANDUIT* field polish connectors; includes FHSCT heat shrink curing tool – 110 VAC, 60 Hz.	1
FCAMKITUPG-G	Upgrades FCAMKIT with the additional tools, consumables, installation instructions and stripping templates required for termination of all *PANDUIT* field polish connectors; includes FHSCT-W heat shrink curing tool – 230 VAC, 50 Hz.	1

For *OPTICAM*® Pre-Polished Cam Termination Kits, see page C2.20.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Components for Field Polish Fiber Optic Termination Kits

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
Tools (included in FIELDKIT and FIELDKIT-G)			
FKITCASE	Case for fiber termination kits.	1	—
CST115	Fiber cable jacket stripper.	1	—
FALC	Alcohol bottle (empty).	1	10
FBFSP	Fiber buffer stripper.	1	10
FSCDVR	Screwdriver.	1	50
FGLS	Safety glasses.	1	10
FTWZR	Tweezers.	1	10
FWBTL	Water bottle (empty).	1	10
FKS	Fiber Kevlar shears.	1	10
FWRKMAT	Fiber safe workmat.	1	10
Tools (included in FIELDKIT, FIELDKIT-G, FCAMKITUPG and FCAMKITUPG-G)			
FSCRIBE	Carbide scribe.	1	10
FSCOPE	Fiber inspection microscope (200X).	1	—
FLCASCP	1.25mm adapter for FSCOPE.	1	—
FLOUPEX10	Eye loupe (10x).	1	—
FCRP5	Crimp tool (hex sizes: .048", .100", .128", .151", .190").	1	—
FLPT	Crimp tool required for 1.6mm/2.0mm jacketed cable termination.	1	—
FJPKGU	Universal polishing puck (2.5mm ferrule).	1	10
FLCPK	LC polishing puck (1.25mm ferrule).	1	—
FPAD	Fiber polishing pad (70 durometer).	1	10
FLCPAD	Polishing pad and plate (85 durometer).	1	10
FHSCT	Heat shrink curing tool (110 VAC, 60 Hz) required for 1.6mm/2.0mm jacketed cable termination (included in FIELDKIT and FCAMKITUPG).	1	—
FHSCT-W	Heat shrink curing tool (230 VAC, 50 Hz) required for 1.6mm/2.0mm jacketed cable termination (included in FIELDKIT-G and FCAMKITUPG-G).	1	—
Field Polish Consumables (included in FIELDKIT, FIELDKIT-G, FIELDKITRFB, FCAMKITUPG and FCAMKITUPG-G)			
FSYR-X	Syringes with needle tips.	10	50
FPWIRE	Piano wire.	1	10
LJSL4-Y3-2.5	Cable labels.	1	10
FJPMR	Primer (50ml).	1	10
FJPXY	Anaerobic adhesive (10ml).	1	10
FPP5-L	5µm polishing paper (AL_2O_3).	50	250
FPF1-V	1µm diamond polishing film.	5	50
FLCFPLF-X	0.05µm lapping film.	10	—
Cleaning Consumables (included in FIELDKIT, FIELDKIT-G, FIELDKITRFB and FCLEANKIT)			
FWP-C	Lint-free wipes.	100	1000
FSWB-C	Cleaning swabs.	100	1000
FSTY	Safety stickers for fiber scraps.	1	10
PFX-0	Permanent marking pen, fine tip, black ink (one included in each kit).	1	10
Replacement Parts			
FSCRBLD	Replacement blade for carbide scribe.	1	10

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NEW! MTP* Connector Cleaning Tools

- All tools feature a dry cloth cleaning system with an ultra clean micro-fiber cloth that captures debris and contamination
- Anti-static cloth minimizes additional debris from being attracted to connector surfaces
- Densely woven, robust cloth doesn't fray or leave fibrous materials behind
- Easy-to-install replacement reels are available for reel type MTP* connector cleaning tools (FMTPFCT and FMTPMFCT) for continuous cleaning without the need for tool replacement
- *QuickNet*™ Cassette MTP* Connector Cleaning Tool is designed to clean MTP* connectors inside *QuickNet*™ Cassettes, adapters, faceplates or bulkheads
- *QuickNet*™ Cassette MTP* Connector Cleaning Tool's unique design enables cleaning of male (with pins) or female (without pins) MTP* connectors
- All tools and refills can be used to clean 400 MTP* or MPO connectors



FMTPFCT



FMTPMFCT



FIBCCT



FMTPRR6

Part Number	Part Description	Std. Pkg. Qty.
Reel Type MTP* Connector Cleaning Tools		
FMTPFCT	Reel type MTP* connector cleaning tool for cleaning MTP* female connectors (without pins).	1
FMTPMFCT	Reel type MTP* connector cleaning tool for cleaning MTP* male connectors (with pins).	1
***QuickNet*™ Cassette MTP* Connector Cleaning Tool**		
FIBCCT	*QuickNet*™ Cassette MTP* connector cleaning tool for cleaning MTP* connectors inside *QuickNet*™ Cassettes, adapters, faceplates or bulkheads.	1
Cleaning Reel Refill for Reel Type MTP* Connector Cleaning Tools		
FMTPRR6	Cleaning reel refill for FMTPFCT and FMTPMFCT reel type MTP* connector cleaning tools (includes six reels).	1

*MTP is a registered trademark of US Conec Ltd.

Opticom® High Density Connector Removal Tool

- Provides easy access for inserting and removing connectors to minimize adjacent connector disturbance, especially in high density applications
- Used with simplex and duplex LC and SC connectors in fiber adapter panels, pre-terminated cassettes, and enclosures
- Tool includes end effectors for LC connectors and a carrying case for storage and transportation
- Removable end effectors for SC or LC connectors and LED light for working in dimly lit areas are available separately



HDCRT



KHDCRT-FL

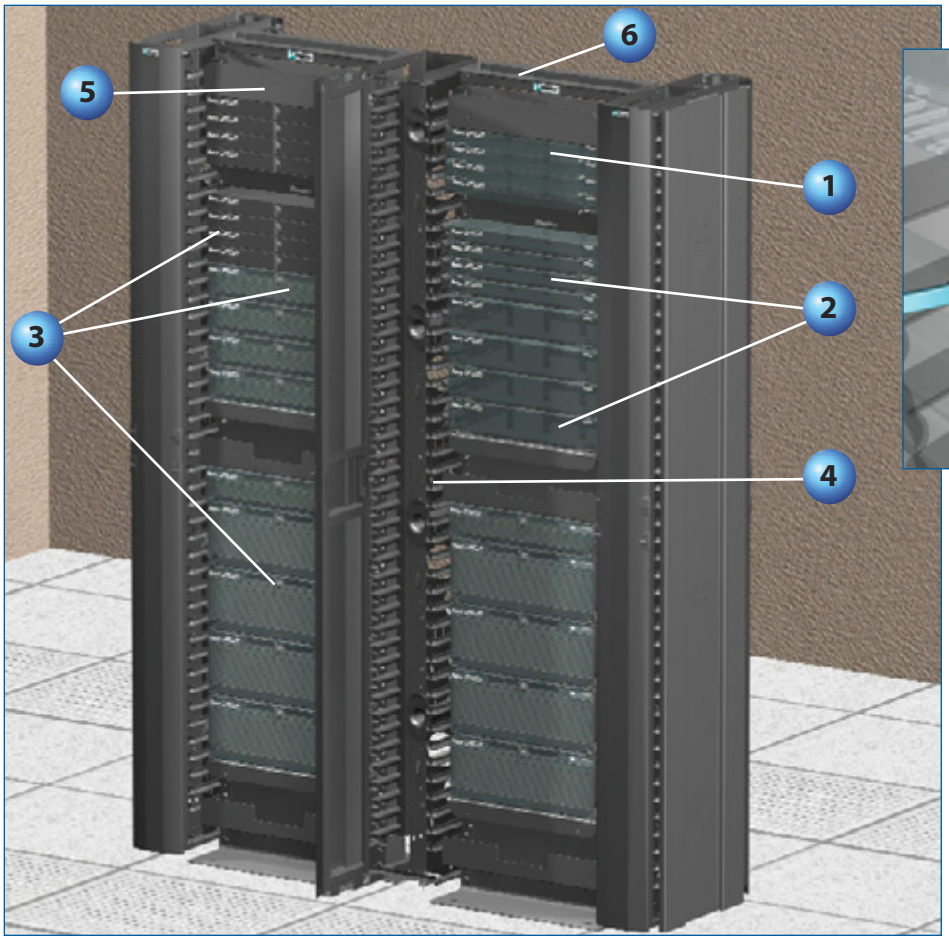


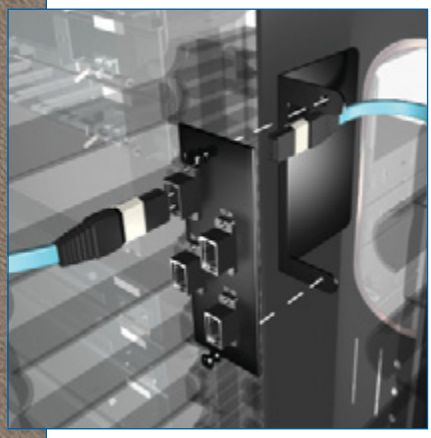
KHDCRT-SCE

Part Number	Part Description	Std. Pkg. Qty.
***Opticom*® High Density Connector Removal Tool**		
HDCRT	High density connector removal tool includes end effector for simplex and duplex LC connectors, and carrying case.	1
Accessories		
KHDCRT-FL	Flashlight kit for HDCRT tool.	1
KHDCRT-SCE	End effector for simplex and duplex SC connectors.	1
KHDCRT-LCE	Replacement end effector for simplex and duplex LC connectors.	1

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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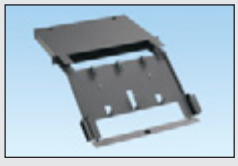
OPTICOM® System Roadmap



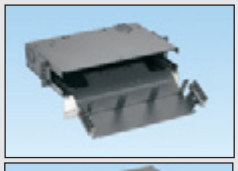


OPTICOM® Zero RU Brackets attach to rack without using additional rack space (see page C2.28)

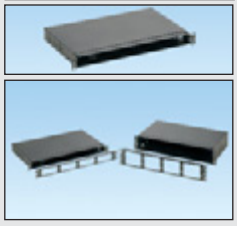
1 **OPTICOM® QUICKNET™ Rack Mount Fiber Cassette Enclosures (page C2.26)**



2 **OPTICOM® Rack Mount Fiber Enclosures (page C2.26)**



3 **OPTICOM® Rack Mount Fiber Trays and Patch Panels (page C2.27)**

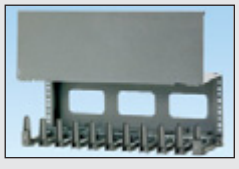


4 **PATCHRUNNER™ Vertical Cable Management system (page C4.7)**



5 **NCMHAEF – High Capacity Horizontal Cable Manager (page C4.22)**





6 **CMR19X84 – Standard EIA Rack, 19"x7', 45 rack units (RU) (page C4.15)**



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OPTICOM® QUICKNET™ Rack Mount Fiber Cassette Enclosures

- Mount to standard EIA 19" rack rails
- Hold QUICKNET™ Cassettes, OPTICOM® Fiber Adapter Panels, and OPTICOM® Fiber Optic Splice Modules
- Suitable for all pre-terminated, field terminated or field-splice applications
- Up to four cassettes or FAPs per rack unit for maximum patch field density
- Slide-out, tilt-down drawer provides full front access to all fibers and cables
- Patented front cable management rings ensure bend radius control and strain relief for fiber patch cords
- Innovative rear cable management for proper slacking/spooling of trunk cable break-outs and interconnect cables
- Multiple trunk cable entry locations
- Include fiber optic cable routing kit (grommets, cable ties, spools, strain relief bracket and ID/caution labels) for various cable management solutions



Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
FCE1U	Holds up to four QUICKNET™ Cassettes, FAP adapter panels, or FOSM splice modules. Dimensions: 1.73"H x 17.60"W x 16.30"D (43.9mm x 447.0mm x 414.0mm)	1	1
FCE2U	Holds up to eight QUICKNET™ Cassettes, FAP adapter panels, or FOSM splice modules. Dimensions: 3.48"H x 17.60"W x 16.30"D (88.4mm x 447.0mm x 414.0mm)	2	1
FCE4U	Holds up to twelve QUICKNET™ Cassettes, FAP adapter panels, or FOSM splice modules. Dimensions: 6.98"H x 17.60"W x 16.30"D (177.0mm x 447.0mm x 414.0mm)	4	1

^One rack space = 1.75" (44.45mm).
Optional locks available for rack mount enclosures.
All product color is black.

OPTICOM® Rack Mount Fiber Enclosures

- Mount to standard 19" or 23" EIA rack or cabinet
- Hold OPTICOM® Fiber Adapter Panels and OPTICOM® Fiber Optic Splice Modules
- Front and rear access on all models via durable molded-hinge doors
- Integral bend radius control and cable management for fiber patch cords
- Multiple trunk cable entry locations
- Include fiber optic cable routing kit (grommets, cable ties, saddle clips, strain relief bracket and ID/caution labels) for various cable management solutions



FRME1



FRME2



FRME3



FRME4

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
FRME1	Holds up to 3 FAP or FMP adapter panels. Slide-out drawer provides front access to fibers. Dimensions: 1.74"H x 17.16"W x 11.80"D (44.2mm x 435.9mm x 299.7mm)	1	1
FRME2	Holds up to 6 FAP or FMP adapter panels. Slide-out drawer provides front access to fibers. Dimensions: 3.45"H x 17.16"W x 11.80"D (87.6mm x 433.3mm x 292.1mm)	2	1
FRME3	Holds up to 9 FAP or FMP adapter panels. Fixed bulkhead design. Dimensions: 5.00"H x 17.16"W x 11.80"D (127.0mm x 433.3mm x 292.1mm)	3	1
FRME4	Holds up to 12 FAP or FMP adapter panels. Fixed bulkhead design. Dimensions: 6.62"H x 17.16"W x 11.80"D (168.1mm x 433.3mm x 292.1mm)	4	1

^One rack space = 1.75" (44.45mm).
Optional locks available for rack mount enclosures.
All product color is black.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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OPTICOM® Rack Mount Fiber Trays

- Mount to standard EIA 19" rack rails
- Standard front or angled front options
- Use with CFAPPBL panels to protect fibers and terminations
- Can be used as a back box for MINI-COM® Patch Panels
- Removable top cover provides access to connections, fibers, and slack storage in rear of tray
- Multiple trunk cable entry locations provided on rear and sides of enclosure
- Include fiber optic cable routing kit (grommets, cable ties, spools, strain relief bracket and ID/caution labels) for various cable management solutions



FMT1



FMT2

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
Standard Fiber Mount Trays			
FMT1	Mount with CFAPPBL1 fiber adapter patch panel to hold up to four QUICKNET™ Cassettes, FAP, and FMP adapter panels. Dimensions: 1.75"H x 17.16"W X 11.16"D (44.4mm x 433.3mm x 283.5mm)	1	1
FMT2	Mount with CFAPPBL2 fiber adapter patch panel to hold up to eight QUICKNET™ Cassettes, FAP, or FMP adapter panels. Dimensions: 3.48"H x 17.16"W x 11.16"D (88.3mm x 433.3mm x 283.5mm)	2	1
Angled Fiber Mount Trays			
FMT1A	Mount with CFAPPBL1A angled fiber adapter patch panel to hold up to four FAP or FMP adapter panels. Dimensions: 1.75"H x 17.16"W X 11.16"D (44.4mm x 433.3mm x 283.5mm)	1	1
FMT2A	Mount with CFAPPBL2A angled fiber adapter patch panel to hold up to eight FAP or FMP adapter panels. Dimensions: 3.48"H x 17.16"W x 11.16"D (88.3mm x 433.3mm x 283.5mm)	2	1

^One rack space = 1.75" (44.45mm).
All product color is black.

OPTICOM® Fiber Adapter Patch Panels

- Mount to standard EIA 19" rack rails
- Standard version holds both QUICKNET™ Cassettes and OPTICOM® Fiber Adapter Panels
- Angled version holds OPTICOM® Fiber Adapter Panels and matches MINI-COM® Angled Patch Panel profile
- Use with OPTICOM® FMT Fiber Mount Tray to protect fibers and terminations



CFAPPBL1



CFAPPBL2

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
Standard Fiber Adapter Patch Panels			
CFAPPBL1	Flat fiber patch panel. Holds up to four FAP or FMP adapter panels.	1	1
CFAPPBL2	Flat fiber patch panel. Holds up to eight FAP or FMP adapter panels.	2	1
Angled Fiber Adapter Patch Panels			
CFAPPBL1A	Angled fiber patch panel. Holds up to four FAP or FMP adapter panels.	1	1
CFAPPBL2A	Angled fiber patch panel. Holds up to eight FAP or FMP adapter panels.	2	1

^One rack space = 1.75" (44.45mm).
All product color is black.

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NEW! OPTICOM® Zero RU Fiber Adapter Panel Brackets

- Mount directly to rack or enclosure to provide location, connection, and quick deployment of OPTICOM® Fiber Adapter Panels (pages C2.31,C2.32) or QUICKNET™ Pre-Terminated Cassettes (pages C2.33,C2.34) without using additional rack space
- Used in storage area network (SAN) applications requiring high density interconnect
- Can be used with OPTICOM® MPO/MTP* Fiber Adapter Panels on page C2.31 and QUICKNET™ Pre-Terminated Hydra Cable Assemblies on page C2.43 to facilitate connection to the active equipment
- Angled bracket includes adhesive foam tape and magnetic strip for mounting to rack
- Standard straight bracket screws directly to rack or enclosure



FEABRUA



FEABRU

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.	No. of Rack Spaces^
FEABRUA	Zero RU adhesive or magnetic mount 90° angle fiber enclosure adapter panel bracket.	1	10	0
FEABRU	Zero RU screw mount fiber enclosure adapter panel bracket.	1	10	0

^One rack space = 1.75" (44.45mm).
*MTP is a registered trademark of US Conec Ltd.

OPTICOM® Wall Mount Enclosures

- Hold OPTICOM® QUICKNET™ Cassettes and OPTICOM® Fiber Adapter Panels
- Rugged all metal construction for fiber protection and secure mounting
- Compact design allows installation in tight areas
- Separate doors for service side and user side with optional keyed locks for added security
- Include fiber optic cable routing kit (grommets, cable ties, spools, strain relief bracket and ID/caution labels) for various cable management solutions
- For QUICKNET™ Pre-Terminated Cassettes see pages C2.33, C2.34



FWME2



FWME4

Part Number	Part Description	Std. Pkg. Qty.
Fiber Wall Mount Enclosures		
FWME1	Holds one QUICKNET™ Cassette, FAP, or FMP adapter panel. Dimensions: 12.00"W x 5.09"H x 2.32"D (304.8mm x 129.3mm x 59.1mm)	1
FWME2	Holds up to two QUICKNET™ Cassettes, FAP, or FMP panels. Dimensions: 12.00"W x 10.18"H x 2.32"D (304.8mm x 258.6mm x 59.1mm)	1
FWME4	Holds up to four QUICKNET™ Cassettes, FAP, or FMP panels. Dimensions: 16.11"W x 12.25"H x 3.52"D (409.2mm x 311.0mm x 89.4mm)	1
FWME8	Holds up to eight QUICKNET™ Cassettes, FAP, or FMP panels. Dimensions: 16.11"W x 16.11"H x 5.00"D (409.2mm x 409.2mm x 127.0mm)	1
Fiber Accessories		
FELS	Fiber enclosure lock for service side.	1
FELU	Fiber enclosure lock for user side.	1

All product color is black.

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OPTICOM® Fiber Slack Management Accessories

- Slack management and cable routing accessories for use in OPTICOM® rack mount and wall mount fiber enclosures
- Maintain minimum bend radius and ensure proper cable management
- Smooth rounded edges on all surfaces eliminate potential for snagging and stress on fiber optic cables



FMS1



FMSS



VWS106



VWSDC

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
Fiber Slack Management Spools			
FMS1	Spools and manages fiber slack in OPTICOM® fiber enclosures. Features fiber retention tabs and fingers. Comes with two spools and adhesive mounts. Dimensions: 1.00"H x 4.00" dia. (25.4mm x 100.0mm)	1	10
FMSS	Top-hat style fiber slack spool. Single spool with adhesive mount. Dimensions: 1.25"H x 2.50" dia. spool, 3.25" dia. flange (31.8mm x 63.5mm spool, 82.6mm flange)	1	10
Fiber Saddle Clips			
VWS106-C	Single saddle clip for fiber slack management and fiber patch cord routing. Accepts up to 1.06" dia. (26.9mm) cable bundle. Nylon 6.6 material, natural color. Push mount into 0.18" (4mm) pre-drilled holes in OPTICOM® Fiber Enclosures.	100	500
VWSDC-C*	Dual saddle clip for fiber slack management and fiber patch cord routing. Accepts two cable bundles up to 1.06" dia. (26.9mm) each. Nylon 6.6 material, natural color. Push mount into .18" (4mm) pre-drilled holes in OPTICOM® Fiber Enclosures.	100	500

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OPTICOM® Splice Modules, Trays, and Holders



FOSMF



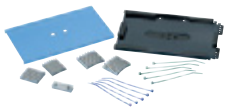
FSC24



FSTK

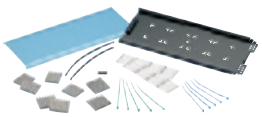


FSTHS



FST6

FSTHE



FST24



FST24H3

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
Fiber Optic Splice Modules			
FOSMF	Fiber optic splice module holds and protects up to 24 fusion splices. Self-stacking modules with integral cable management and fiber slacking/spooling features. Black plastic base and clear plastic hinged cover. For use with any *PANDUIT*® *OPTICOM*® Rack Mounted Enclosure. Dimensions: 0.30"H x 14.03"W x 5.28"D (7.6mm x 356.4mm x 134.1mm)	1	10
FOSMM	Fiber optic splice module holds and protects up to 24 mechanical splices. Self-stacking modules with integral cable management and fiber slacking/spooling features. Black plastic base and clear plastic hinged cover. For use with any *PANDUIT*® *OPTICOM*® Rack Mounted Enclosure. Dimensions: 0.30"H x 14.03"W x 5.28"D (7.6mm x 356.4mm x 134.1mm)	1	10
FOSMWF	Fiber splice module holds and protects up to twelve fusion splices with integral cable management and fiber slacking/spooling features. Black plastic base and clear plastic hinged cover. For use with any *PANDUIT*® *OPTICOM*® Wall Mounted Enclosure. Dimensions: 0.30"H x 9.80"W x 5.28"D (7.6mm x 248.9mm x 134.1mm)	1	10
FOSMWM	Fiber splice module holds and protects up to twelve mechanical splices with integral cable management and fiber slacking/spooling features. Black plastic base and clear plastic hinged cover. For use with any *PANDUIT*® *OPTICOM*® Wall Mounted Enclosure. Dimensions: 0.30"H x 9.80"W x 5.28"D (7.6mm x 248.9mm x 134.1mm)	1	10
Splice Sleeve Holder			
FSC24	Accommodates and protects up to 24 fusion splices. Comes with label, clear cover, and adhesive mount. For use with any *PANDUIT* *OPTICOM*® Enclosure. Dimensions: 0.50"H x 3.12"W x 2.47"D (12.7mm x 79.4mm x 62.7mm)	1	10
Metal Splice Tray and Holder – 6-Splice Increment			
FSTK	Fiber splice tray kit for up to six mechanical or fusion splices. Fits in any *PANDUIT*® *OPTICOM*® Enclosure. Stack up to two high using FSTHS stacking holder. Dimensions: 0.40"H x 3.40"W x 6.60"L (10.2mm x 86.4mm x 167.6mm)	1	10
FSTHS	Stacking holder for FSTK fiber splice tray with built-in fiber spooling. Holds and secures one/two splice tray(s) with *PANDUIT*® *TAK-TY*® Cable Ties. Mount with existing enclosure hardware. For use in FWME2 wall mount enclosure. Dimensions: 1.62"H x 3.50"W x 6.50"L (41.1mm x 88.9mm x 167.6mm)	1	10
Metal Splice Trays and Holder – 12-Splice Increment			
FST6	Fiber splice tray kit for up to twelve mechanical or fusion splices. Fits in *PANDUIT* FMT, FMD, FWME4 and FWME8 series enclosures. Stack up to four high using FSTHE stacking unit in rack mount enclosures or using FST6H4 stacking unit in wall mount enclosures. Dimensions: 0.40"H x 4.42"W x 7.90"L (10.2mm x 112.3mm x	1	10
FSTHE	Stacking holder for FST6 fiber splice tray. Holds and secures one to four splice trays (FST6) with *PANDUIT*® *TAK-TY*® Cable Ties. Mount with included adhesive strips or mounting screws. For use in FMT1, FMT2, FMT1A or FMT2A rack mount trays. Dimensions: 1.75"H x 4.56"W x 8.06"L (44.5mm x 115.8mm x 204.7mm)	1	10
Metal Splice Trays and Holder – 24-Splice Increment			
FST24	Fiber splice tray kit for up to 24 mechanical or fusion splices or 144 ribbon fusion splices. Fits in *PANDUIT* FRME3 and FRME4 rack mount enclosures. Stacks up to three high using FST24H3 stacking unit. Dimensions: 0.37"H x 4.38"W x 11.75"L (9.4mm x 111.3mm x 298.5mm)	1	10
FST24H3	Stacking holder for FST24 fiber splice tray with built in fiber spooling. Holds and secures one to three splice trays with *PANDUIT*® *TAK-TY*® Cable Ties. Mounting hardware included. For use with FRME3 and FRME4 rack mount enclosures. Dimensions: 2.07"H x 4.56"W x 11.61"L (52.6mm x 115.8mm x 294.9mm)	1	10

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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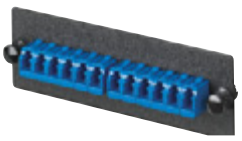
OPTICOM® Fiber Adapter Panels (FAPs)

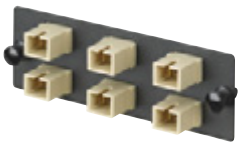
- Snap quickly into the front of all OPTICOM® components
- Loaded panels available with MPO/MTP*, LC, SC, ST, MT-RJ or FC adapters
- LC Fiber Adapter Panels are Sr./Jr. to conserve enclosure space
- Choice of phosphor bronze or zirconia ceramic split sleeves to fit specific network requirements; zirconia ceramic split sleeves are required for singlemode applications
- Unloaded MINI-COM® Multimedia Modular Panel available to customize your installation for multimedia applications requiring integration of fiber optic and copper cables

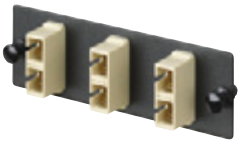

FAP6WBLMTP

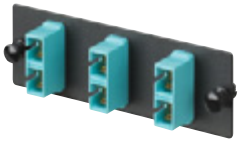

FAP12WEIDLC


FAP6WAQDLC


FAP12WBULCZ


FAP6WEISC


FAP3WEIDSC


FAP3WAQDSCZ

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
	NEW! MPO/MTP* Fiber Adapter Panels		
FAP4WBLMTP	MPO/MTP* FAP loaded with four MPO/MTP* fiber optic adapters; for use with 12-fiber MPO or MTP* connectors.	1	10
FAP6WBLMTP	MPO/MTP* FAP loaded with six MPO/MTP* fiber optic adapters; for use with 12-fiber MPO or MTP* connectors.	1	10
	LC Multimode Fiber Adapter Panels		
FAP12WAQLCZ	LC *10GIG*™ FAP loaded with twelve LC *10GIG*™ Simplex Multimode Fiber Optic Adapters (Aqua) with zirconia ceramic split sleeves.	1	10
FAP6WEIDLC	LC FAP loaded with six LC duplex multimode fiber optic adapters (Electric Ivory) with phosphor bronze split sleeves.	1	10
FAP8WEIDLC	LC FAP loaded with eight LC duplex multimode fiber optic adapters (Electric Ivory) with phosphor bronze split sleeves.	1	10
FAP12WEIDLC	LC FAP loaded with twelve LC duplex multimode fiber optic adapters (Electric Ivory) with phosphor bronze split sleeves.	1	10
FAP6WAQDLC	LC *10GIG*™ FAP loaded with six LC *10GIG*™ Duplex Multimode Fiber Optic Adapters (Aqua) with phosphor bronze split sleeves.	1	10
FAP6WAQDLCZ	LC *10GIG*™ FAP loaded with six LC *10GIG*™ Duplex Multimode Fiber Optic Adapters (Aqua) with zirconia ceramic split sleeves.	1	10
FAP12WAQDLCZ	LC *10GIG*™ FAP loaded with twelve LC *10GIG*™ Duplex Multimode Fiber Optic Adapters (Aqua) with zirconia ceramic split sleeves.	1	10
	LC Singlemode Fiber Adapter Panels		
FAP12WBULCZ	LC FAP loaded with twelve LC simplex singlemode fiber optic adapters (Blue) with zirconia ceramic split sleeves.	1	10
FAP6WBUDLCZ	LC FAP loaded with six LC duplex singlemode fiber optic adapters (Blue) with zirconia ceramic split sleeves.	1	10
FAP8WBUDLCZ	LC FAP loaded with eight LC duplex singlemode fiber optic adapters (Blue) with zirconia ceramic split sleeves.	1	10
FAP12WBUDLCZ	LC FAP loaded with twelve LC duplex singlemode fiber optic adapters (Blue) with zirconia ceramic split sleeves.	1	10
	SC Multimode Fiber Adapter Panels		
FAP6WEISC	SC FAP loaded with six SC simplex multimode fiber optic adapters (Electric Ivory) with phosphor bronze split sleeves.	1	10
FAP12WEISC	SC FAP loaded with twelve SC simplex multimode fiber optic adapters (Electric Ivory) with phosphor bronze split sleeves.	1	10
FAP6WAQSC	SC *10GIG*™ FAP loaded with six SC *10GIG*™ Simplex Multimode Fiber Optic Adapters (Aqua) with phosphor bronze split sleeves.	1	10
FAP6WAQSCZ	SC *10GIG*™ FAP loaded with six SC *10GIG*™ Simplex Multimode Fiber Optic Adapters (Aqua) with zirconia ceramic split sleeves.	1	10
FAP2WEIDSC	SC FAP loaded with two SC duplex multimode fiber optic adapters (Electric Ivory) with phosphor bronze split sleeves.	1	10
FAP3WEIDSC	SC FAP loaded with three SC duplex multimode fiber optic adapters (Electric Ivory) with phosphor bronze split sleeves.	1	10
FAP3WEIDSCA	SC FAP (angled) loaded with three SC duplex multimode fiber optic adapters (Electric Ivory) with phosphor bronze split sleeves.	1	10
FAP4WEIDSC	SC FAP loaded with four SC duplex multimode fiber optic adapters (Electric Ivory) with phosphor bronze split sleeves.	1	10
FAP6WEIDSC	SC FAP loaded with six SC duplex multimode fiber optic adapters (Electric Ivory) with phosphor bronze split sleeves.	1	10
FAP2WAQDSC	SC *10GIG*™ FAP loaded with two SC *10GIG*™ Duplex Multimode Fiber Optic Adapters (Aqua) with phosphor bronze split sleeves.	1	10
FAP3WAQDSC	SC *10GIG*™ FAP loaded with three SC *10GIG*™ Duplex Multimode Fiber Optic Adapters (Aqua) with phosphor bronze split sleeves.	1	10
FAP4WAQDSC	SC *10GIG*™ FAP loaded with four SC *10GIG*™ Duplex Multimode Fiber Optic Adapters (Aqua) with phosphor bronze split sleeves.	1	10
FAP6WAQDSC	SC *10GIG*™ FAP loaded with six SC *10GIG*™ Duplex Multimode Fiber Optic Adapters (Aqua) with phosphor bronze split sleeves.	1	10

For MTP* Connector Cleaning Tools, see page C2.24.
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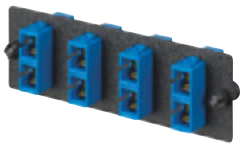
Table continued on page C2.32

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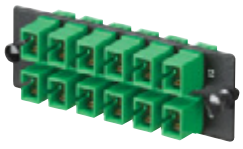
OPTICOM® Fiber Adapter Panels (continued)



FAP12WBUSCZ



FAP4WBUDSCZ



FAP12WAGSCZ



FAP6WST



FAP6WSTA



FMP6WMTRJ



FAP6WFC



FMP6



FAPB

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
FAP2WAQDSCZ	SC *10GIG*™ FAP loaded with two SC *10GIG*™ Duplex Multimode Fiber Optic Adapters (Aqua) with zirconia ceramic split sleeves.	1	10
FAP3WAQDSCZ	SC *10GIG*™ FAP loaded with three SC *10GIG*™ Duplex Multimode Fiber Optic Adapters (Aqua) with zirconia ceramic split sleeves.	1	10
FAP4WAQDSCZ	SC *10GIG*™ FAP loaded with four SC *10GIG*™ Duplex Multimode Fiber Optic Adapters (Aqua) with zirconia ceramic split sleeves.	1	10
FAP6WAQDSCZ	SC *10GIG*™ FAP loaded with six SC *10GIG*™ Duplex Multimode Fiber Optic Adapters (Aqua) with zirconia ceramic split sleeves.	1	10
SC Singlemode Fiber Adapter Panels			
FAP6WBUSCZ	SC FAP loaded with six SC simplex singlemode fiber optic adapters (Blue) with zirconia ceramic split sleeves.	1	10
FAP12WBUSCZ	SC FAP loaded with twelve SC simplex singlemode fiber optic adapters (Blue) with zirconia ceramic split sleeves.	1	10
FAP2WBUDSCZ	SC FAP loaded with two SC duplex singlemode fiber optic adapters (Blue) with zirconia ceramic split sleeves.	1	10
FAP3WBUDSCZ	SC FAP loaded with three SC duplex singlemode fiber optic adapters (Blue) with zirconia ceramic split sleeves.	1	10
FAP4WBUDSCZ	SC FAP loaded with four SC duplex singlemode fiber optic adapters (Blue) with zirconia ceramic split sleeves.	1	10
FAP6WBUDSCZ	SC FAP loaded with six SC duplex singlemode fiber optic adapters (Blue) with zirconia ceramic split sleeves.	1	10
SC APC Singlemode Fiber Adapter Panels			
FAP6WAGSCZ	SC APC FAP loaded with six SC APC simplex singlemode fiber optic adapters (Green) with zirconia ceramic split sleeves.	1	10
FAP12WAGSCZ	SC APC FAP loaded with twelve SC APC simplex singlemode fiber optic adapters (Green) with zirconia ceramic split sleeves.	1	10
FAP2WAGDSCZ	SC APC FAP loaded with two SC APC duplex singlemode fiber optic adapters (Green) with zirconia ceramic split sleeves.	1	10
FAP3WAGDSCZ	SC APC FAP loaded with three SC APC duplex singlemode fiber optic adapters (Green) with zirconia ceramic split sleeves.	1	10
FAP4WAGDSCZ	SC APC FAP loaded with four SC APC duplex singlemode fiber optic adapters (Green) with zirconia ceramic split sleeves.	1	10
FAP6WAGDSCZ	SC APC FAP loaded with six SC APC duplex singlemode fiber optic adapters (Green) with zirconia ceramic split sleeves.	1	10
ST Multimode Fiber Adapter Panels			
FAP6WST	ST FAP loaded with six ST simplex multimode fiber optic adapters with phosphor bronze split sleeves.	1	1
FAP6WSTA	ST FAP (angled) loaded with six ST simplex multimode fiber optic adapters with phosphor bronze split sleeves.	1	1
FAP8WST	ST FAP loaded with eight ST simplex multimode fiber optic adapters with phosphor bronze split sleeves.	1	1
ST Singlemode Fiber Adapter Panels			
FAP6WSTZ	ST FAP loaded with six ST simplex singlemode fiber optic adapters with zirconia ceramic split sleeves.	1	10
FAP8WSTZ	ST FAP loaded with eight ST simplex singlemode fiber optic adapters with zirconia ceramic split sleeves.	1	10
MT-RJ Multimode Fiber Adapter Panels			
FMP6WMTRJ	MT-RJ FAP loaded with six MT-RJ duplex multimode fiber optic adapters (Electric Ivory).	1	10
FMP6WMTRJBL	MT-RJ FAP loaded with six MT-RJ duplex multimode fiber optic adapters (Black).	1	10
FC Multimode Fiber Adapter Panels			
FAP6WFC	FC FAP loaded with six FC simplex multimode fiber optic adapters with phosphor bronze split sleeves.	1	10
FC Singlemode Fiber Adapter Panels			
FAP6WFCZ	FC FAP loaded with six FC simplex singlemode fiber optic adapters with zirconia ceramic split sleeves.	1	10
Multimedia Modular Panel			
FMP6	Unloaded panel accepts up to six *MINI-COM*® Modules for UTP, fiber optic, and audio/video applications.	1	10
Blank Fiber Adapter Panel			
FAPB	Blank fiber adapter panel – reserves space for future use.	1	10

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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QUICKNET™ Pre-Terminated MTP* Cassettes

- Compatible with OPTICOM® QUICKNET™ Rack Mount Fiber Cassette Enclosures on page C2.26, Zero RU Fiber Adapter Panel Brackets on page C2.28 and OPTICOM® Wall Mount Enclosures on page C2.28; up to 96 fiber connections in 1 RU
- Low insertion loss of 0.5dB max. per optimized cassette and 1.0dB max. per standard cassette; ensures system meets IEEE 802.3ae max. channel loss specification of <2.6dB
- Return loss: >20dB (multimode), >26dB (*10G*IG™ multimode), >40dB (singlemode)
- Connect together with high density female MTP* cable assemblies as interconnecting network segments for deploying a remote or data center location in minutes
- Significantly reduce installation time and labor by eliminating field connector terminations
- Factory terminated, assembled, and 100% tested
- Insertion loss data provided on every fiber cassette
- Return loss data provided on all singlemode fiber cassettes
- Lifetime traceability of test data to a Q.C. number on each fiber cassette
- *10G*IG™ 50/125µm Fiber Cassettes are tested per IEEE 802.3ae 10 GbE to support network transmission speeds up to 10 Gb/s for link lengths up to 300m at 850nm; backward compatible with all 50/125µm (OM2) MPO or MTP* system requirements



FCXO-24-10Y



FCX-12-3SY



FCX-12-3Y



FC6-12-10Y



FC6-24-10Y

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
Optimized *10G*IG™ 50/125µm (OM3) Multimode Pre-Terminated MTP* Cassettes			
FCXO-12-10Y	Six LC duplex adapters to one male MTP*; 12-fiber optimized pre-terminated MTP* cassette provides low insertion loss of 0.5dB max. per fiber; 10 GbE 50/125µm (OM3) fiber.	1	10
FCXO-24-10Y	Twelve LC duplex adapters to two male MTPs*; 24-fiber optimized pre-terminated MTP* cassette provides low insertion loss of 0.5dB max. per fiber; 10 GbE 50/125µm (OM3) fiber.	1	10
FCXO-12-3Y	Six SC duplex adapters to one male MTP*; 12-fiber optimized pre-terminated MTP* cassette provides low insertion loss of 0.5dB max. per fiber; 10 GbE 50/125µm (OM3) fiber.	1	10
***10G*IG™ 50/125µm (OM3) Multimode Pre-Terminated MTP* Cassettes**			
FCX-12-10Y	Six LC duplex adapters to one male MTP*; 12-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; 10 GbE 50/125µm (OM3) fiber.	1	10
FCX-24-10Y	Twelve LC duplex adapters to two male MTPs*; 24-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; 10 GbE 50/125µm (OM3) fiber.	1	10
FCX-12-3SY	Twelve SC simplex adapters to one male MTP*; 12-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; 10 GbE 50/125µm (OM3) fiber.	1	10
FCX-12-3Y	Six SC duplex adapters to one male MTP*; 12-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; 10 GbE 50/125µm (OM3) fiber.	1	10
50/125µm (OM2) Multimode Pre-Terminated MTP* Cassettes			
FC5-12-10Y	Six LC duplex adapters to one male MTP*; 12-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; 50/125µm (OM2) fiber.	1	10
FC5-24-10Y	Twelve LC duplex adapters to two male MTPs*; 24-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; 50/125µm (OM2) fiber.	1	10
FC5-12-3SY	Twelve SC simplex adapters to one male MTP*; 12-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; 50/125µm (OM2) fiber.	1	10
FC5-12-3Y	Six SC duplex adapters to one male MTP*; 12-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; 50/125µm (OM2) fiber.	1	10
62.5/125µm (OM1) Multimode Pre-Terminated MTP* Cassettes			
FC6-12-10Y	Six LC duplex adapters to one male MTP*; 12-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; 62.5/125µm (OM1) fiber.	1	10
FC6-24-10Y	Twelve LC duplex adapters to two male MTPs*; 24-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; 62.5/125µm (OM1) fiber.	1	10
FC6-12-3SY	Twelve SC simplex adapters to one male MTP*; 12-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; 62.5/125µm (OM1) fiber.	1	10
FC6-12-3Y	Six SC duplex adapters to one male MTP*; 12-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; 62.5/125µm (OM1) fiber.	1	10

For MTP* Connector Cleaning Tools, see page C2.24.

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Table continued on page C2.34

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QUICKNET™ Pre-Terminated Cassettes (continued)



FC6STMFCMY



FC8FJMFCSY

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
9/125µm (OS1) Singlemode Pre-Terminated MTP* Cassettes			
FC9-12-10Y	Six LC duplex adapters to one male MTP*; 12-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; singlemode (OS1) fiber.	1	10
FC9-24-10Y	Twelve LC duplex adapters to two male MTPs*; 24-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; singlemode (OS1) fiber.	1	10
FC9-12-3SY	Twelve SC simplex adapters to one male MTP*; 12-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; singlemode (OS1) fiber.	1	10
FC9-12-3Y	Six SC duplex adapters to one male MTP*; 12-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; singlemode (OS1) fiber.	1	10
62.5/125µm (OM1) Multimode Pre-Terminated MTP* Cassettes			
FC6SCMFCMY	Three SC duplex adapters to one male MTP*; 6-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; 62.5/125µm (OM1) fiber.	1	10
FC6STMFCMY	Six ST simplex adapters to one male MTP*; 6-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; 62.5/125µm (OM1) fiber.	1	10
FC8FJMFCMY	Four FJ® Duplex Jack Modules to one male MTP*; 8-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; 62.5/125µm (OM1) fiber.	1	10
9/125µm (OS1) Singlemode Pre-Terminated MTP* Cassettes			
FC6SCMFCSY	Three SC duplex adapters to one male MTP*; 6-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; singlemode (OS1) fiber.	1	10
FC6STMFCSY	Six ST simplex adapters to one male MTP*; 6-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; singlemode (OS1) fiber.	1	10
FC8FJMFCSY	Four FJ® Duplex Jack Modules to one male MTP*; 8-fiber pre-terminated MTP* cassette provides low insertion loss of 1.0dB max. per fiber; singlemode (OS1) fiber.	1	10
62.5/125µm (OM1) Multimode Pre-Terminated Pigtail Cassettes			
FC6SCMP5Y	Three SC duplex adapters to 5m pigtail; 6-fiber pre-terminated pigtail cassette; 62.5/125µm (OM1) fiber.	1	10
FC12SCMP5Y	Six SC duplex adapters to 5m pigtail; 12-fiber pre-terminated pigtail cassette; 62.5/125µm (OM1) fiber.	1	10
FC6STMP5Y	Six ST simplex adapters to 5m pigtail; 6-fiber pre-terminated pigtail cassette; 62.5/125µm (OM1) fiber.	1	10
FC8FJMP5Y	Four FJ® Duplex Jack Modules to 5m pigtail; 8-fiber pre-terminated pigtail cassette; singlemode (OS1) fiber.	1	10
9/125µm (OS1) Singlemode Pre-Terminated Pigtail Cassettes			
FC6SCSP5Y	Three SC duplex adapters to 5m pigtail; 6-fiber pre-terminated pigtail cassette; singlemode (OS1) fiber.	1	10
FC12SCSP5Y	Six SC duplex adapters to 5m pigtail; 12-fiber pre-terminated pigtail cassette; singlemode (OS1) fiber.	1	10
FC6STSP5Y	Six ST simplex adapters to 5m pigtail; 6-fiber pre-terminated pigtail cassette; singlemode (OS1) fiber.	1	10
FC8FJSP5Y	Four FJ® Duplex Jack Modules to 5m pigtail; 8-fiber pre-terminated pigtail cassette; singlemode (OS1) fiber.	1	10

For MTP* Connector Cleaning Tools, see page C2.24.

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QUICKNET™ MTP* Interconnect Cable Assemblies – Multimode *10GIG*™ 50/125µm (OM3)

- Pass all TIA/EIA-568-B.3 performance requirements
- FOCIS-5 compliant
- Insertion loss per mated pair: 0.50dB typical; 0.75dB max.
- Tested per IEEE 802.3ae 10 GbE to support network transmission speeds up to 10 Gb/s for link lengths up to 300m at 850nm with 50/125µm (OM3) laser optimized fiber
- Backward compatible with all 50/125µm (OM2) MPO or MTP* system requirements
- Factory terminated and 100% tested for insertion loss
- Insertion loss and return loss data recorded for every *10GIG*™ Multimode Interconnect Cable Assembly
- Lifetime traceability of test data to a Q.C. number on each cable assembly



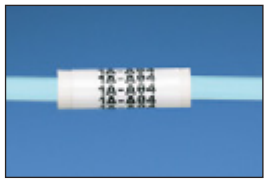
Part Number	Part Description	Length (m)^	Std. Pkg. Qty.	Std. Ctn. Qty.
FX12D5-5M1Y	Female MTP* to female MTP* 12-fiber interconnect cable assembly (one female MTP* connector on each end on ribbon interconnect cable) – 10 GbE 50/125µm.	1	1	10

^Additional lengths and availability: Interconnect cable assemblies are available in 1m – 10m lengths in 1m increments, and 15m, 20m, 25m and 30m lengths. To order lengths other than 1m, replace the 1 after the M (FX12D5-5M1Y) with the desired length (FX12D5-5M2Y for 2m length). The above lengths are stock items. For other lengths or male MTPs*, contact Customer Service for actual lead times.

For MTP* Connector Cleaning Tools, see page C2.24.

*MTP is a registered trademark of US Conec Ltd.

Cable Labels for *QUICKNET*™ MTP* Interconnect Cable Assemblies – Multimode *10GIG*™ 50/125µm (OM3)



Suggested Label Solutions for TIA/EIA 606-A Compliance				
Patch Cord Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER***™ **LS8E Hand-Held Printer Label**	***COUGAR***™ **LS9 Hand-Held Printer Label**
FX12D5-5M*Y	**S100X220YAJ and NWSLC-7Y‡**	**S100X225VATY and NWSLC-7Y‡**	**S100X220VAC and NWSLC-7Y‡**	**T100X000CBC-BK and NWSLC-7Y**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For complete information on fiber optic cable identification solutions, reference page C2.55.
*MTP is a registered trademark of US Conec Ltd.

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A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

QUICKNET™ MTP* Interconnect Cable Assemblies – Multimode 50/125µm (OM2)

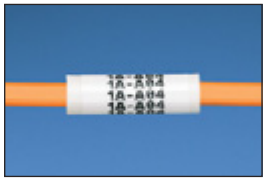
- Pass all TIA/EIA-568-B.3 performance requirements
- FOCIS-5 compliant
- Insertion loss per mated pair: 0.50dB typical; 0.75dB max.
- Factory terminated and 100% tested for insertion loss
- Insertion loss data recorded for every multimode cable assembly
- Lifetime traceability of test data to a Q.C. number on each cable assembly



Part Number	Part Description	Length (m)^	Std. Pkg. Qty.	Std. Ctn. Qty.
F512D5-5M1Y	Female MTP* to female MTP* 12-fiber interconnect cable assembly (one female MTP* connector on each end on ribbon interconnect cable) – 50/125µm.	1	1	10

^Additional lengths and availability: Interconnect cable assemblies are available in 1m – 10m lengths in 1m increments, and 15m, 20m, 25m and 30m lengths. To order lengths other than 1m, replace the 1 after the M (F512D5-5M1Y) with the desired length (F512D5-5M2Y for 2m length). The above lengths are stock items. For other lengths or male MTPs*, contact Customer Service for actual lead times.
For MTP* Connector Cleaning Tools, see page C2.24.
*MTP is a registered trademark of US Conec Ltd.

Cable Labels for QUICKNET™ MTP* Interconnect Cable Assemblies – Multimode 50/125µm (OM2)



Suggested Label Solutions for TIA/EIA 606-A Compliance				
Cable Assembly Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
F512D5-5M*Y	S100X220YAJ and NWSLC-7Y‡	S100X225VATY and NWSLC-7Y‡	S100X220VAC and NWSLC-7Y‡	T100X000CBC-BK and NWSLC-7Y

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For complete information on fiber optic cable identification solutions, reference page C2.57.
*MTP is a registered trademark of US Conec Ltd.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

QUICKNET™ MTP* Interconnect Cable Assemblies – Multimode 62.5/125µm (OM1)

- Pass all TIA/EIA-568-B.3 performance requirements
- FOCIS-5 compliant
- Insertion loss per mated pair: 0.50dB typical; 0.75dB max.
- Factory terminated and 100% tested for insertion loss
- Insertion loss data recorded for every multimode cable assembly
- Lifetime traceability of test data to a Q.C. number on each cable assembly



F612D5-5M*Y

Part Number	Part Description	Length (m)^	Std. Pkg. Qty.	Std. Ctn. Qty.
6-Fiber Interconnect Cable Assembly – Female MTP* to Female MTP*				
F66D5-5M1Y	Female MTP* to female MTP* 6-fiber interconnect cable assembly (one female MTP* connector on each end on ribbon interconnect cable) – 62.5/125µm.	1	1	10
8-Fiber Interconnect Cable Assembly – Female MTP* to Female MTP*				
F68D5-5M1Y	Female MTP* to female MTP* 8-fiber interconnect cable assembly (one female MTP* connector on each end on ribbon interconnect cable) – 62.5/125µm.	1	1	10
12-Fiber Interconnect Cable Assembly – Female MTP* to Female MTP*				
F612D5-5M1Y	Female MTP* to female MTP* 12-fiber interconnect cable assembly (one female MTP* connector on each end on ribbon interconnect cable) – 62.5/125µm.	1	1	10
6-Fiber Interconnect Cable Assembly – Six ST Connectors to Female MTP*				
F66D2-5M1Y	ST to female MTP* 6-fiber interconnect cable assembly (six ST connectors on one end and one female MTP* connector on the other end on ribbon interconnect cable) – 62.5/125µm.	1	1	10
6-Fiber Interconnect Cable Assembly – Six SC Connectors to Female MTP*				
F66D3-5M1Y	SC to female MTP* 6-fiber interconnect cable assembly (six SC connectors on one end and one female MTP* connector on the other end on ribbon interconnect cable) – 62.5/125µm.	1	1	10
12-Fiber Interconnect Cable Assembly – Twelve SC Connectors to Female MTP*				
F612D3-5M1Y	SC to female MTP* 12-fiber interconnect cable assembly (twelve SC connectors on one end and one female MTP* connector on the other end on ribbon interconnect cable) – 62.5/125µm.	1	1	10
8-Fiber Interconnect Cable Assembly – Four FJ® Jack Modules to Female MTP*				
F68D6J-5M1Y	FJ® Jack Module to female MTP* 8-fiber interconnect cable assembly (four FJ® Jack Modules on one end and one female MTP* connector on the other end on ribbon interconnect cable) – 62.5/125µm.	1	1	10



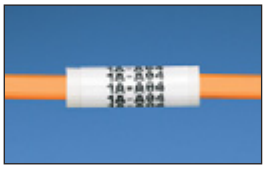
F612D3-5M*Y

^Additional lengths and availability: 12-fiber interconnect cable assemblies are available in 1m – 10m lengths in 1m increments, and 15m, 20m, 25m and 30m lengths. All other cable assemblies above are available in 1m, 2m, 3m and 10m lengths. To order lengths other than 1m, replace the 1 after the M (F612D5-5M1Y) with the desired length (F612D5-5M2Y for 2m length). The above lengths are stock items. For other lengths or male MTPs*, contact Customer Service for actual lead times.

For MTP* Connector Cleaning Tools, see page C2.24.

*MTP is a registered trademark of US Conec Ltd.

Cable Labels for QUICKNET™ MTP* Interconnect Cable Assemblies – Multimode 62.5/125µm (OS1)



Suggested Label Solutions for TIA/EIA 606-A Compliance				
Cable Assembly Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
All MTP* Interconnect Cable Assemblies on this page	S100X220YAJ and NWSLC-7Y‡	S100X225VATY and NWSLC-7Y‡	S100X220VAC and NWSLC-7Y‡	T100X000CBC-BK and NWSLC-7Y

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

‡For complete information on fiber optic cable identification solutions, reference page C2.55.

*MTP is a registered trademark of US Conec Ltd.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

QUICKNET™ MTP* Interconnect Cable Assemblies – Singlemode 9/125µm (OS1)

- Pass all TIA/EIA-568-B.3 performance requirements
- FOCIS-5 compliant
- 100% factory inspected end face geometry (SC, ST, and FJ® end faces are 100% inspected in compliance with Telcordia GR-326-CORE, Issue 3)
- Insertion loss per mated pair: 0.50dB typical; 0.75dB max.
- 8-degree APC polish (55dB minimum Return Loss) on singlemode MTP* and UPC polish (55dB minimum Return Loss) on singlemode SC, ST, and FJ® satisfy high-speed network application requirements
- Factory terminated and 100% tested for insertion loss and return loss
- Insertion loss and return loss data recorded for every singlemode cable assembly
- Lifetime traceability of test data to a Q.C. number on each cable assembly



F912D5-5M*Y



F96D3-5M*Y

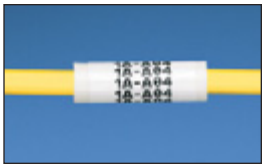
Part Number	Part Description	Length (m)^	Std. Pkg. Qty.	Std. Ctn. Qty.
6-Fiber Interconnect Cable Assembly – Female MTP* to Female MTP*				
F96D5-5M1Y	Female MTP* to female MTP* 6-fiber interconnect cable assembly (one female MTP* connector on each end on ribbon interconnect cable) – 9/125µm.	1	1	10
8-Fiber Interconnect Cable Assembly – Female MTP* to Female MTP*				
F98D5-5M1Y	Female MTP* to female MTP* 8-fiber interconnect cable assembly (one female MTP* connector on each end on ribbon interconnect cable) – 9/125µm.	1	1	10
12-Fiber Interconnect Cable Assembly – Female MTP* to Female MTP*				
F912D5-5M1Y	Female MTP* to female MTP* 12-fiber interconnect cable assembly (one female MTP* connector on each end on ribbon interconnect cable) – 9/125µm.	1	1	10
6-Fiber Interconnect Cable Assembly – Six ST Connectors to Female MTP*				
F96D2-5M1Y	ST to female MTP* 6-fiber interconnect cable assembly (six ST connectors on one end and one female MTP* connector on the other end on ribbon interconnect cable) – 9/125µm.	1	1	10
6-Fiber Interconnect Cable Assembly – Six SC Connectors to Female MTP*				
F96D3-5M1Y	SC to female MTP* 6-fiber interconnect cable assembly (six SC connectors on one end and one female MTP* connector on the other end on ribbon interconnect cable) – 9/125µm.	1	1	10
12-Fiber Interconnect Cable Assembly – Twelve SC Connectors to Female MTP*				
F912D3-5M1Y	SC to MTP* female 12-fiber interconnect cable assembly (twelve SC connectors on one end and one female MTP* connector on the other end on ribbon interconnect cable) – 9/125µm.	1	1	10
8-Fiber Interconnect Cable Assembly – Four FJ® Jack Modules to Female MTP*				
F98D6J-5M1Y	FJ® Jack Module to female MTP* 8-fiber interconnect cable assembly (four FJ® Jack Modules on one end and one female MTP* connector on the other end on ribbon interconnect cable) – 9/125µm.	1	1	10

^Additional lengths and availability: 12-fiber interconnect cable assemblies are available in 1m – 10m lengths in 1m increments, and 15m, 20m, 25m and 30m lengths. All other cable assemblies above are available in 1m, 2m, 3m and 10m lengths. To order lengths other than 1m, replace the 1 after the M (F912D5-5M1Y) with the desired length (F912D5-5M2Y for 2m length). The above lengths are stock items. For other lengths or male MTPs*, contact Customer Service for actual lead times.

For MTP* Connector Cleaning Tools, see page C2.24.

*MTP is a registered trademark of US Conec Ltd.

Cable Labels for QUICKNET™ MTP* Interconnect Cable Assemblies – Singlemode 9/125µm (OS1)



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Cable Assembly Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	**PANTHER™ LS8E Hand-Held Printer Label**	**COUGAR™ LS9 Hand-Held Printer Label**
All MTP* Interconnect Cable Assemblies	**S100X220YAJ and NWSLC-7Y‡**	**S100X225VATY and NWSLC-7Y‡**	**S100X220VAC and NWSLC-7Y‡**	**T100X000CBC-BK and NWSLC-7Y**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

‡For complete information on fiber optic cable identification solutions, reference page B2.48.

*MTP is a registered trademark of US Conec Ltd.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

NEW! QUICKNET™ Pre-Terminated MTP* Trunk Cable Assemblies

- Connectivity meets or exceeds TIA/EIA-568-B.3 and ISO/IEC 11801 performance requirements
- Jacketed cable is compliant with NFPA 262 (OFNP) flame rating
- MTP* (12-fiber) connectors are FOCIS-5 compliant
- Insertion loss per mated pair: 0.50dB typical, 0.75dB max.
- *PANDUIT* proprietary MTP* polishing provides low insertion loss and high return loss, minimizing variability for improved channel link loss performance
- Factory terminated and 100% tested for insertion loss (test data supplied with each assembly); singlemode and *10G*IG™ Multimode Trunk Cable Assemblies are also tested for return loss
- TIA/EIA-568-B.1-7 (Method A) standards based polarity supports 10 Gb/s, multimode, and singlemode fiber types, and allows infrastructure backwards compatibility for component interchangeability and a lower cost of ownership
- *10G*IG™ laser optimized fiber is tested per IEEE 802.3ae 10 GbE to support network transmission speeds up to 10 Gb/s for link lengths up to 300m at 850nm
- Application specific designs available to tailor configuration, reach, and breakout construction to application requirements; for more information contact *PANDUIT* or visit www.panduit.com



FSPX2455F*A**

Part Number	Part Description	Length (Ft.)^	Std. Pkg. Qty.
Female MTP* to Female MTP* – Multimode Plenum Trunk Cable Assemblies			
FSPX1255F100A	Female MTP* to female MTP* 12-fiber *10G*IG™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	100	1
FSPX1255F150A	Female MTP* to female MTP* 12-fiber *10G*IG™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	150	1
FSPX1255F200A	Female MTP* to female MTP* 12-fiber *10G*IG™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	200	1
FSPX2455F100A	Female MTP* to female MTP* 24-fiber *10G*IG™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	100	1
FSPX2455F150A	Female MTP* to female MTP* 24-fiber *10G*IG™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	150	1
FSPX2455F200A	Female MTP* to female MTP* 24-fiber *10G*IG™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	200	1
FSPX4855F100A	Female MTP* to female MTP* 48-fiber *10G*IG™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	100	1
FSPX4855F150A	Female MTP* to female MTP* 48-fiber *10G*IG™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	150	1
FSPX4855F200A	Female MTP* to female MTP* 48-fiber *10G*IG™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	200	1
FSP51255F100A	Female MTP* to female MTP* 12-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	100	1
FSP51255F150A	Female MTP* to female MTP* 12-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	150	1
FSP51255F200A	Female MTP* to female MTP* 12-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	200	1
FSP52455F100A	Female MTP* to female MTP* 24-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	100	1
FSP52455F150A	Female MTP* to female MTP* 24-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	150	1
FSP52455F200A	Female MTP* to female MTP* 24-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	200	1

^Additional lengths and availability: The above lengths and configurations are stock items. For other lengths or configurations, contact Customer Service for actual lead times.
For MTP* Connector Cleaning Tools, see page C2.24.
*MTP is a registered trademark of US Conec Ltd.

Table continued on page C2.40

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

NEW! QUICKNET™ Pre-Terminated MTP* Trunk Cable Assemblies (continued)

Part Number	Part Description	Length (Ft.)^	Std. Pkg. Qty.
FSP54855F100A	Female MTP* to female MTP* 48-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	100	1
FSP54855F150A	Female MTP* to female MTP* 48-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	150	1
FSP54855F200A	Female MTP* to female MTP* 48-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	200	1
Female MTP* to Female MTP* – Singlemode Plenum Trunk Cable Assemblies			
FSP91255F100A	Female MTP* to female MTP* 12-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	100	1
FSP91255F150A	Female MTP* to female MTP* 12-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	150	1
FSP91255F200A	Female MTP* to female MTP* 12-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	200	1
FSP92455F100A	Female MTP* to female MTP* 24-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	100	1
FSP92455F150A	Female MTP* to female MTP* 24-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	150	1
FSP92455F200A	Female MTP* to female MTP* 24-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	200	1
FSP94855F100A	Female MTP* to female MTP* 48-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	100	1
FSP94855F150A	Female MTP* to female MTP* 48-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	150	1
FSP94855F200A	Female MTP* to female MTP* 48-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	200	1

^Additional lengths and availability: The above lengths and configurations are stock items. For other lengths or configurations, contact Customer Service for actual lead times.

For MTP* Connector Cleaning Tools, see page C2.24.

*MTP is a registered trademark of US Conec Ltd.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

NEW! OPTI-CORE® Pre-Terminated Traditional Trunk Cable Assemblies

- Connectivity meets or exceeds TIA/EIA-568-B.3 and ISO/IEC 11801 performance requirements
- Jacketed cable is compliant with UL 1666 (OFNR) or NFPA 262 (OFNP) flame rating
- Insertion loss per mated pair: 0.10dB typical, 0.30dB max. (multimode); 0.25dB typical, 0.50dB max. (singlemode)
- Traditional connectors (*PANDUIT* LC, SC, and ST) provide design flexibility throughout the data center
- Factory terminated and 100% tested for insertion loss (test data supplied with each assembly); singlemode and *10GIG*™ Multimode Trunk Cable Assemblies are also tested for return loss
- *10GIG*™ laser optimized fiber is tested per IEEE 802.3ae 10 GbE to support network transmission speeds up to 10 Gb/s for link lengths up to 300m at 850nm
- Application specific designs available to tailor configuration, reach, and breakout construction to application requirements; for more information contact *PANDUIT* or visit www.panduit.com



FSP51211F***A

Part Number	Part Description	Length (Ft.)^	Std. Pkg. Qty.
LC to LC Simplex – Multimode Plenum Trunk Cable Assemblies			
FSPX1211F100A	LC to LC simplex 12-fiber *10GIG*™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	100	1
FSPX1211F150A	LC to LC simplex 12-fiber *10GIG*™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	150	1
FSPX1211F200A	LC to LC simplex 12-fiber *10GIG*™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	200	1
FSPX2411F100A	LC to LC simplex 24-fiber *10GIG*™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	100	1
FSPX2411F150A	LC to LC simplex 24-fiber *10GIG*™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	150	1
FSPX2411F200A	LC to LC simplex 24-fiber *10GIG*™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	200	1
FSPX4811F100A	LC to LC simplex 48-fiber *10GIG*™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	100	1
FSPX4811F150A	LC to LC simplex 48-fiber *10GIG*™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	150	1
FSPX4811F200A	LC to LC simplex 48-fiber *10GIG*™ 50/125µm OM3 Multimode Plenum Rated Trunk Cable Assembly with pulling eye on one end.	200	1
FSP51211F100A	LC to LC simplex 12-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	100	1
FSP51211F150A	LC to LC simplex 12-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	150	1
FSP51211F200A	LC to LC simplex 12-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	200	1
FSP52411F100A	LC to LC simplex 24-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	100	1
FSP52411F150A	LC to LC simplex 24-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	150	1
FSP52411F200A	LC to LC simplex 24-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	200	1

^Additional lengths and availability: The above lengths and configurations are stock items. For other lengths or configurations, contact Customer Service for actual lead times.

For MTP* Connector Cleaning Tools, see page C2.24.

*MTP is a registered trademark of US Conec Ltd.

Table continued on page C2.42

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

NEW! OPTI-CORE® Pre-Terminated Traditional Trunk Cable Assemblies (continued)

Part Number	Part Description	Length (Ft.)^	Std. Pkg. Qty.
FSP54811F100A	LC to LC simplex 48-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	100	1
FSP54811F150A	LC to LC simplex 48-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	150	1
FSP54811F200A	LC to LC simplex 48-fiber 50/125µm OM2 multimode plenum rated trunk cable assembly with pulling eye on one end.	200	1
LC to LC Simplex – Singlemode Plenum Trunk Cable Assemblies			
FSP91211F100A	LC to LC simplex 12-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	100	1
FSP91211F150A	LC to LC simplex 12-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	150	1
FSP91211F200A	LC to LC simplex 12-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	200	1
FSP92411F100A	LC to LC simplex 24-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	100	1
FSP92411F150A	LC to LC simplex 24-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	150	1
FSP92411F200A	LC to LC simplex 24-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	200	1
FSP94811F100A	LC to LC simplex 48-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	100	1
FSP94811F150A	LC to LC simplex 48-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	150	1
FSP94811F200A	LC to LC simplex 48-fiber 9/125µm OS1 singlemode plenum rated trunk cable assembly with pulling eye on one end.	200	1

^Additional lengths and availability: The above lengths and configurations are stock items. For other lengths or configurations, contact Customer Service for actual lead times.
For MTP* Connector Cleaning Tools, see page C2.24.
*MTP is a registered trademark of US Conec Ltd.

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NEW! QUICKNET™ Pre-Terminated Hydra Cable Assemblies

- Connectivity meets or exceeds TIA/EIA-568-B.3 and ISO/IEC 11801 performance requirements
- Jacketed cable is compliant with NFPA 262 (OFNP) flame rating
- MTP* (12-fiber) connectors are FOCIS-5 compliant
- Insertion loss per mated pair: 0.50dB typical, 0.75dB max.
- *PANDUIT* proprietary MTP* polishing provides low insertion loss and high return loss, minimizing variability for improved channel link loss performance
- Traditional connectors (*PANDUIT* LC, SC, and ST) provide design flexibility throughout the data center
- Insertion loss per mated pair: 0.10dB typical, 0.30dB max. (multimode); 0.25dB typical, 0.50dB max. (singlemode)
- Factory terminated and 100% tested for insertion loss (test data supplied with each assembly); singlemode and *10GIG*™ Multimode Hydra Cable Assemblies also tested for return loss
- TIA/EIA-568-B.1-7 standards based polarity supports 10 Gb/s, multimode, and singlemode fiber types, and allows infrastructure backwards compatibility for component interchangeability and a lower cost of ownership
- *10GIG*™ laser optimized fiber is tested per IEEE 802.3ae 10 GbE to support network transmission speeds up to 10 Gb/s for link lengths up to 300m at 850nm
- Application specific designs available to tailor configuration, reach, and breakout construction to application requirements; for more information contact *PANDUIT* or visit www.panduit.com



FHPX126LM***N

Part Number	Part Description	Length (m)^	Std. Pkg. Qty.
Male MTP* to LC Duplex – Multimode Plenum Hydra Cable Assemblies			
FHPX126LM005N	Male MTP* to LC duplex 12-fiber *10GIG*™ 50/125µm OM3 Multimode Plenum Rated Hydra Cable Assembly with std. 24" (61cm) breakout length.	5	1
FHPX126LM010N	Male MTP* to LC duplex 12-fiber *10GIG*™ 50/125µm OM3 Multimode Plenum Rated Hydra Cable Assembly with std. 24" (61cm) breakout length.	10	1
FHPX126LM015N	Male MTP* to LC duplex 12-fiber *10GIG*™ 50/125µm OM3 Multimode Plenum Rated Hydra Cable Assembly with std. 24" (61cm) breakout length.	15	1
FHPX126LM020N	Male MTP* to LC duplex 12-fiber *10GIG*™ 50/125µm OM3 Multimode Plenum Rated Hydra Cable Assembly with std. 24" (61cm) breakout length.	20	1
FHP5126LM005N	Male MTP* to LC duplex 12-fiber 50/125µm OM2 multimode plenum rated hydra cable assembly with std. 24" (61cm) breakout length.	5	1
FHP5126LM010N	Male MTP* to LC duplex 12-fiber 50/125µm OM2 multimode plenum rated hydra cable assembly with std. 24" (61cm) breakout length.	10	1
FHP5126LM015N	Male MTP* to LC duplex 12-fiber 50/125µm OM2 multimode plenum rated hydra cable assembly with std. 24" (61cm) breakout length.	15	1
FHP5126LM020N	Male MTP* to LC duplex 12-fiber 50/125µm OM2 multimode plenum rated hydra cable assembly with std. 24" (61cm) breakout length.	20	1
Male MTP* to LC Duplex – Singlemode Plenum Hydra Cable Assemblies			
FHP9126LM005N	Male MTP* to LC duplex 12-fiber 9/125µm OS1 singlemode plenum rated hydra cable assembly with std. 24" (61cm) breakout length.	5	1
FHP9126LM010N	Male MTP* to LC duplex 12-fiber 9/125µm OS1 singlemode plenum rated hydra cable assembly with std. 24" (61cm) breakout length.	10	1
FHP9126LM015N	Male MTP* to LC duplex 12-fiber 9/125µm OS1 singlemode plenum rated hydra cable assembly with std. 24" (61cm) breakout length.	15	1
FHP9126LM020N	Male MTP* to LC duplex 12-fiber 9/125µm OS1 singlemode plenum rated hydra cable assembly with std. 24" (61cm) breakout length.	20	1

^Additional lengths and availability: The above lengths and configurations are stock items. For other lengths or configurations, contact Customer Service for actual lead times.

For MTP* Connector Cleaning Tools, see page C2.24.

*MTP is a registered trademark of US Conec Ltd.

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Fan-Out Cords – Multimode 62.5/125µm (OM1)

- Pass all TIA/EIA-568-B.3 performance requirements
- Insertion loss per connection: 0.10dB typical; 0.30dB maximum
- Pigtailed (open) end allows quick high performance field fusion splice during installation to provide the lowest installed cost
- 900µm tight-buffered fibers break out to terminated colored buffers for quick and easy identification of separate channels for accurate installations
- Factory terminated and 100% tested for insertion loss
- Insertion loss data recorded for every multimode fan-out cord
- Lifetime traceability of test data to a Q.C. number on each fan-out cord
- Highest quality flame retardant fiber optic cable with tight-buffered coating on each optical fiber



F612D3-NM*Y

Part Number	Part Description	Length (m)^	Std. Pkg. Qty.	Std. Ctn. Qty.
Distribution Fiber Optic Cords – Six ST Connectors to Pigtails				
F66D2-NM1Y	ST to pigtail 6-fiber fan-out cord (six ST connectors on one end and open on the other end on distribution cable) – 62.5/125µm.	1	1	10
Distribution Fiber Optic Cords – Six SC Connectors to Pigtails				
F66D3-NM1Y	SC to pigtail 6-fiber fan-out cord (six SC connectors on one end and open on the other end on distribution cable) – 62.5/125µm.	1	1	10
Distribution Fiber Optic Cords – Four FJ® Jack Modules to Pigtails				
F68D6J-NM1Y	FJ® Jack Module to pigtail 8-fiber fan-out cord (four FJ® Jack Modules on one end and open on the other end on distribution cable) – 62.5/125µm.	1	1	10
Distribution Fiber Optic Cords – Twelve SC Connectors to Pigtails				
F612D3-NM1Y	SC to pigtail 12-fiber fan-out cord (twelve SC connectors on one end and open on the other end on distribution cable) – 62.5/125µm.	1	1	10

^Additional lengths and availability: Fan-out cords are available in 1m, 2m, 3m and 10m lengths. To order lengths other than 1m, replace the 1 after the M (F66D2-NM1Y) with the desired length (F66D2-NM2Y for 2m length). The above lengths are stock items. For other lengths, contact Customer Service for actual lead times.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Fan-Out Cords – Singlemode 9/125µm (OS1)

- Pass all TIA/EIA-568-B.3 performance requirements
- 100% factory inspected end face geometry in compliance with Telcordia GR-326-CORE, Issue 3
- Typical insertion loss per connection: 0.25dB
- UPC polished (55dB minimum Return Loss)
- Pigtailed (open) end allows quick high performance field fusion splice during installation to provide the lowest installed cost
- 900µm tight-buffered fibers break out to terminated colored buffers for quick and easy identification of separate channels for accurate installations
- Factory terminated and 100% tested for insertion loss and return loss
- Insertion loss and return loss data recorded for every singlemode fan-out cord
- Lifetime traceability of test data to a Q.C. number on each fan-out cord
- Highest quality flame retardant fiber optic cable with tight-buffered coating on each optical fiber



F96D3-NM*Y

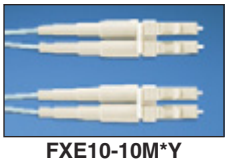
Part Number	Part Description	Length (m)^	Std. Pkg. Qty.	Std. Ctn. Qty.
Distribution Fiber Optic Cords – Six ST Connectors to Pigtails				
F96D2-NM1Y	ST to pigtail 6-fiber fan-out cord (six ST connectors on one end and open on the other end on distribution cable) – 9/125µm.	1	1	10
Distribution Fiber Optic Cords – Six SC Connectors to Pigtails				
F96D3-NM1Y	SC to pigtail 6-fiber fan-out cord (six SC connectors on one end and open on the other end on distribution cable) – 9/125µm.	1	1	10
Distribution Fiber Optic Cords – Four FJ® Jack Modules to Pigtails				
F98D6J-NM1Y	FJ® Jack Module to pigtail 8-fiber fan-out cord (four FJ® Jack Modules on one end and open on the other end on distribution cable) – 9/125µm.	1	1	10
Distribution Fiber Optic Cords – Twelve SC Connectors to Pigtails				
F912D3-NM1Y	SC to pigtail 12-fiber fan-out cord (twelve SC connectors on one end and open on the other end on distribution cable) – 9/125µm.	1	1	10

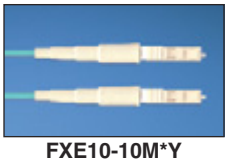
^Additional lengths and availability: Fan-out cords are available in 1m, 2m, 3m and 10m lengths. To order lengths other than 1m, replace the 1 after the M (F96D2-NM1Y) with the desired length (F96D2-NM2Y for 2m length). The above lengths are stock items. For other lengths, contact Customer Service for actual lead times.

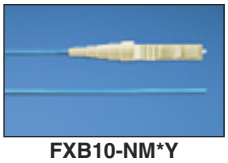
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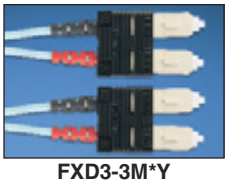
OPTI-CORE® 10GIG™ 50/125µm (OM3) Fiber Optic Patch Cords and Pigtails

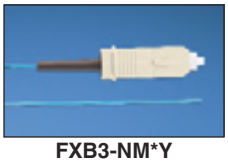
- Available in riser (OFNR) or plenum (OFNP) flame ratings; part numbers listed are for OFNR (FXE10-10M1Y)
- For OFNP, place a P after the X in the part number and drop the Y (FXPE10-10M1)
- Patch cords are tested to support network transmission speeds up to 10 Gb/s for link lengths up to 300m with an 850nm source per IEEE 802.3ae 10 GbE Standards
- Pass all TIA/EIA-568-B.3 performance requirements
- Insertion loss per connection: 0.10dB typical; 0.30dB maximum
- Backward compatible for use with all 50/125µm system requirements
- Factory terminated and 100% tested for insertion loss
- Insertion loss data recorded for every multimode patch cord
- Lifetime traceability of test data to a Q.C. number on each patch cord
- Highest quality flame retardant fiber optic cable with tight-buffered coating on each optical fiber

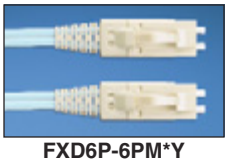

FXE10-10M*Y

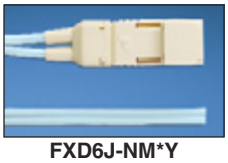

FXE10-10M*Y

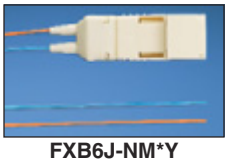

FXB10-NM*Y

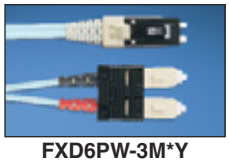

FXD3-3M*Y


FXB3-NM*Y


FXD6P-6PM*Y


FXD6J-NM*Y


FXB6J-NM*Y

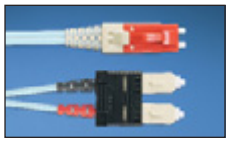

FXD6PW-3M*Y

Part Number	Part Description	Length (m)^	Std. Pkg. Qty.	Std. Ctn. Qty.
LC to LC – 10 GbE Multimode Duplex Patch Cords – 1.6mm Jacketed Cable				
FXE10-10M1Y	LC to LC multimode duplex patch cord, 10 GbE, 1.6mm jacketed cable (one duplex LC connector on each end) – 50/125µm.	1	1	10
LC to LC – 10 GbE Multimode Simplex Patch Cords – 1.6mm Jacketed Cable				
FXF10-10M1Y	LC to LC multimode duplex patch cord, 10 GbE, 1.6mm jacketed cable (one duplex LC connector on each end) – 50/125µm.	1	1	10
LC to Pigtail – 10 GbE Multimode Simplex Pigtails – 900µm Buffered Fiber				
FXB10-NM1Y	LC to pigtail multimode simplex pigtail, 10 GbE, 900µm buffered fiber (one LC connector on one end and open on the other end) – 50/125µm.	1	1	10
SC to SC – 10 GbE Multimode Duplex Patch Cords – 3mm Jacketed Cable				
FXD3-3M1Y	SC to SC multimode duplex patch cord, 10 GbE, 3mm jacketed cable (one duplex SC connector on each end) – 50/125µm.	1	1	10
SC to Pigtail – 10 GbE Multimode Simplex Pigtails – 900µm Buffered Fiber				
FXB3-NM1Y	SC to pigtail multimode simplex pigtail, 10 GbE, 900µm buffered fiber (one SC connector on one end and open on the other end) – 50/125µm.	1	1	10
FJ® Plug to FJ® 10 GbE Multimode Duplex Patch Cords – 3mm Jacketed Cable				
FXD6P-6PM1Y	FJ® Plug to FJ® Plug multimode duplex patch cord, 10 GbE, 3mm jacketed cable (one FJ® Plug on each end) – 50/125µm.	1	1	10
FJ® Jack Module to Pigtail – 10 GbE Multimode Duplex Patch Cords – 3mm Jacketed Cable				
FXD6J-NM1Y	FJ® Jack Module to pigtail multimode duplex pigtail, 10 GbE, 3mm jacketed cable (one FJ® Jack Module on one end and open on the other end) – 50/125µm.	1	1	10
FJ® Jack Module to Pigtail – 10 GbE Multimode Duplex Pigtails – 900µm Buffered Fiber				
FXB6J-NM1Y	FJ® Jack Module to pigtail multimode duplex pigtail, 10 GbE, 900µm buffered fiber (one FJ® Jack Module on one end and open on the other end) – 50/125µm.	1	1	10
FJ® Plug (Keyed W) to SC – 10 GbE Multimode Duplex Patch Cords – 3mm Jacketed Cable				
FXD6PW-3M1Y	FJ® Plug (keyed W - black) to SC multimode duplex patch cord, 10 GbE, 3mm jacketed cable (one keyed FJ® Plug on one end and one duplex SC connector on the other end) – 50/125µm.	1	1	10
FJ® Plug (Keyed X) to SC – 10 GbE Multimode Duplex Patch Cords – 3mm Jacketed Cable				
FXD6PX-3M1Y	FJ® Plug (keyed X - red) to SC multimode duplex patch cord, 10 GbE, 3mm jacketed cable (one keyed FJ® Plug on one end and one duplex SC connector on the other end) – 50/125µm.	1	1	10

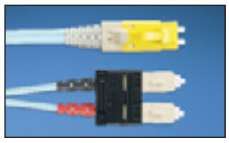
^Additional lengths and availability: Patch cords are available in 1m – 10m lengths in 1m increments, and 15m, 20m, 25m and 30m lengths. Pigtails are available in 1m, 2m, and 3m lengths. To order lengths other than 1m, replace the 1 after the M (FXD3-3M1Y) with the desired length (FXD3-3M2Y for 2m length). The above lengths are stock items. For other lengths, contact Customer Service for actual lead times.

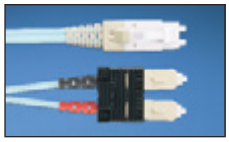
Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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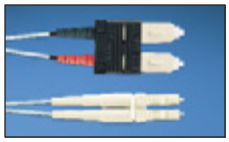
OPTI-CORE® 10GIG™ 50/125µm (OM3) Fiber Optic Patch Cords and Pigtails (continued)


FXD6PX-3M*Y


FXD6PY-3M*Y


FXD6PZ-3M*Y


FXD6PQ-3M*Y


FXE3-10M*Y


FXD6P-3M*Y


FXD6P-3M*Y

Part Number	Part Description	Length (m)^	Std. Pkg. Qty.	Std. Ctn. Qty.
FJ® Plug (Keyed Y) to SC – 10 GbE Multimode Duplex Patch Cords – 3mm Jacketed Cable				
FXD6PY-3M1Y	FJ® Plug (keyed Y - orange) to SC multimode duplex patch cord, 10 GbE, 3mm jacketed cable (one keyed FJ® Plug on one end and one duplex SC connector on the other end) – 50/125µm.	1	1	10
FJ® Plug (Keyed Z) to SC – 10 GbE Multimode Duplex Patch Cords – 3mm Jacketed Cable				
FXD6PZ-3M1Y	FJ® Plug (keyed Z - yellow) to SC multimode duplex patch cord, 10 GbE, 3mm jacketed cable (one keyed FJ® Plug on one end and one duplex SC connector on the other end) – 50/125µm.	1	1	10
FJ® Plug (Keyed Q) to SC – 10 GbE Multimode Duplex Patch Cords – 3mm Jacketed Cable				
FXD6PQ-3M1Y	FJ® Plug (universal keyed Q - white) to SC multimode duplex patch cord, 10 GbE, 3mm jacketed cable (one keyed FJ® Plug on one end and one duplex SC connector on the other end) – 50/125µm.	1	1	10
SC to LC – 10 GbE Multimode Duplex Patch Cords – 1.6mm Jacketed Cable				
FXE3-10M1Y	SC to LC multimode duplex patch cord, 10 GbE, 1.6mm jacketed cable (one duplex SC connector on one end and one duplex LC connector on the other end) – 50/125µm.	1	1	10
FJ® Plug to LC – 10 GbE Multimode Duplex Patch Cords – 1.6mm Jacketed Cable				
FXE6P-10M1Y	FJ® Plug to LC multimode duplex patch cord, 10 GbE, 1.6mm jacketed cable (one FJ® Plug on one end and one duplex LC connector on the other end) – 50/125µm.	1	1	10
FJ® Plug to SC – 10 GbE Multimode Duplex Patch Cords – 3mm Jacketed Cable				
FXD6P-3M1Y	FJ® Plug to SC multimode duplex patch cord, 10 GbE, 3mm jacketed cable (one FJ® Plug on one end and one duplex SC connector on the other end) – 50/125µm.	1	1	10

^Additional lengths and availability: Patch cords are available in 1m – 10m lengths in 1m increments, and 15m, 20m, 25m and 30m lengths. Pigtails are available in 1m, 2m, and 3m lengths. To order lengths other than 1m, replace the 1 after the M (FXD3-3M1Y) with the desired length (FXD3-3M2Y for 2m length). The above lengths are stock items. For other lengths, contact Customer Service for actual lead times.

Cable Labels for OPTI-CORE® 10GIG™ 50/125µm (OM3) Fiber Optic Patch Cords and Pigtails



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Cord Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
All FXE parts	S100X160YAJ and NWSLC-3Y‡	S100X150VATY and NWSLC-3Y‡	S100X160VAC and NWSLC-3Y‡	T100X000CBC-BK and NWSLC-3Y
All FXD parts	S100X220YAJ and NWSLC-7Y‡	S100X225VATY and NWSLC-7Y‡	S100X220VAC and NWSLC-7Y‡	T100X000CBC-BK and NWSLC-7Y

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For complete information on fiber optic cable identification solutions, reference page C2.48.

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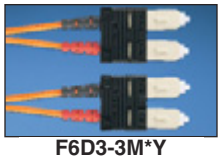
OPTI-CORE® Multimode 62.5/125µm (OM1) or 50/125µm (OM2) Fiber Optic Patch Cords and Pigtails‡

- Available in riser (OFNR) or plenum (OFNP) flame ratings; part numbers listed are for OFNR (F6E10-10M1Y)
- For OFNP, place a P after the 6 (or 5) in the part number and drop the Y (F6PE10-10M1)
- Pass all TIA/EIA-568-B.3 performance requirements
- Insertion loss per connection: 0.10dB typical; 0.30dB maximum
- Factory terminated and 100% tested for insertion loss
- Insertion loss data recorded for every multimode patch cord
- Lifetime traceability of test data to a Q.C. number on each patch cord
- Highest quality flame retardant fiber optic cable with tight-buffered coating on each optical fiber
- To order standard 50/125µm performance (orange cable) patch cords, replace the 6 in the part number (F6D3-3M1) with a 5 (F5D3-3M1)


F6E10-10M*Y


F6E10-10M*Y


F6B10-NM*Y


F6D3-3M*Y

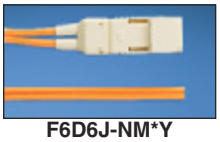

F6S3-3M*Y


F6B3-NM*Y


F6D2-2M*Y


F6S2-2M*Y


F6D6P-6PM*Y

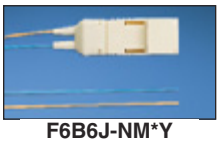

F6D6J-NM*Y

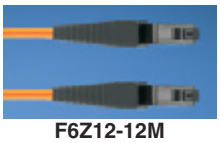
Part Number	Part Description	Length (m)^	Std. Pkg. Qty.	Std. Ctn. Qty.
LC to LC – Multimode Duplex Patch Cords – 1.6mm Jacketed Cable				
F6E10-10M1Y	LC to LC multimode duplex patch cord, 1.6mm jacketed cable (one duplex LC connector on each end) – 62.5/125µm.	1	1	10
LC to LC – Multimode Duplex Patch Cords – 1.6mm Jacketed Cable				
F6F10-10M1Y	LC to LC multimode simplex patch cord, 1.6mm jacketed cable (one simplex LC connector on each end) – 62.5/125µm.	1	1	10
LC to Pigtail – Multimode Simplex Pigtails – 900µm Buffered Fiber				
F6B10-NM1Y	LC to pigtail multimode simplex pigtail, 900µm buffered fiber (one LC connector on one end and open on the other end) – 62.5/125µm.	1	1	10
SC to SC – Multimode Duplex Patch Cords – 3mm Jacketed Cable				
F6D3-3M1Y	SC to SC multimode duplex patch cord, 3mm jacketed cable (one duplex SC connector on each end) – 62.5/125µm.	1	1	10
SC to SC – Multimode Simplex Patch Cords – 3mm Jacketed Cable				
F6S3-3M1Y	SC to SC multimode simplex patch cord, 3mm jacketed cable (one SC connector on each end) – 62.5/125µm.	1	1	10
SC to Pigtail – Multimode Simplex Pigtails – 900µm Buffered Fiber				
F6B3-NM1Y	SC to pigtail multimode simplex pigtail, 900µm buffered fiber (one SC connector on one end and open on the other end) – 62.5/125µm.	1	1	10
ST to ST – Multimode Duplex Patch Cords – 3mm Jacketed Cable				
F6D2-2M1Y	ST to ST multimode duplex patch cord, 3mm jacketed cable (two ST connectors on each end) – 62.5/125µm.	1	1	10
ST to ST – Multimode Simplex Patch Cords – 3mm Jacketed Cable				
F6S2-2M1Y	ST to ST multimode duplex patch cord, 3mm jacketed cable (two ST connectors on each end) – 62.5/125µm.	1	1	10
FJ® Plug to FJ® Plug – Multimode Duplex Patch Cords – 3mm Jacketed Cable				
F6D6P-6PM1Y	FJ® Plug to FJ® Plug multimode duplex patch cord, 3mm jacketed cable (one FJ® Plug on each end) – 62.5/125µm.	1	1	10
FJ® Jack Module to Pigtail – Multimode Duplex Pigtails – 3mm Jacketed Cable				
F6D6J-NM1Y	FJ® Jack Module to pigtail multimode duplex patch cord, 3mm jacketed cable (one FJ® Jack Module on one end and open on the other end) – 62.5/125µm.	1	1	10

‡To order standard 50/125µm performance (orange cable) patch cords, replace the 6 in the part number (F6D3-3M1) with a 5 (F5D3-3M1).
^Additional lengths and availability: Patch cords are available in 1m – 10m lengths in 1m increments, and 15m, 20m, 25m and 30m lengths. Pigtails are available in 1m, 2m, and 3m lengths. To order lengths other than 1m, replace the 1 after the M (F6D3-3M1Y) with the desired length (F6D3-3M2Y for 2m length). The above lengths are stock items. For other lengths or male MT-RJs, contact Customer Service for actual lead times.

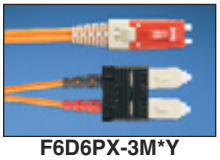
Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

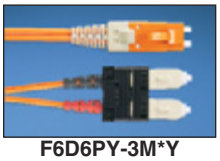
OPTI-CORE® Multimode 62.5/125µm (OM1) or 50/125µm (OM2) Fiber Optic Patch Cords and Pigtails‡ (continued)

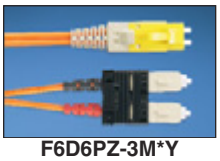

F6B6J-NM*Y

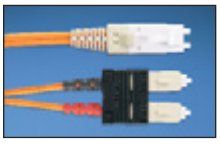

F6Z12-12M


F6D6PW-3M*Y


F6D6PX-3M*Y

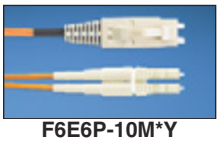

F6D6PY-3M*Y


F6D6PZ-3M*Y


F6D6PQ-3M*Y


F6E3-10M*Y


F6D2-3M*Y


F6E6P-10M*Y

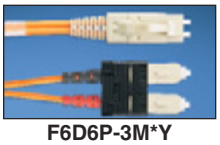
Part Number	Part Description	Length (m)^	Std. Pkg. Qty.	Std. Ctn. Qty.
FJ® Jack Module to Pigtail – Multimode Duplex Pigtails – 900µm Buffered Fiber				
F6B6J-NM1Y	FJ®Jack Module to pigtail multimode duplex pigtail, 900µm buffered fiber (one FJ® Jack Module on one end and open on the other end) – 62.5/125µm.	1	1	10
MT-RJ to MT-RJ – Multimode Duplex Patch Cords – 1.8mm Jacketed Cable				
F6Z12-12M1	Female MT-RJ to female MT-RJ multimode duplex patch cord, 1.8mm jacketed cable (one female MT-RJ connector on each end) – 62.5/125µm.	1	1	10
FJ® Plug (Keyed W) to SC – Multimode Duplex Patch Cords – 3mm Jacketed Cable				
F6D6PW-3M1Y	FJ® Plug (keyed W - black) to SC multimode duplex patch cord, 3mm jacketed cable (one keyed FJ® Plug on one end and one duplex SC connector on the other end) – 62.5/125µm.	1	1	10
FJ® Plug (Keyed X) to SC – Multimode Duplex Patch Cords – 3mm Jacketed Cable				
F6D6PX-3M1Y	FJ® Plug (keyed X - red) to SC multimode duplex patch cord, 3mm jacketed cable (one keyed FJ® Plug on one end and one duplex SC connector on the other end) – 62.5/125µm.	1	1	10
FJ® Plug (Keyed Y) to SC – Multimode Duplex Patch Cords – 3mm Jacketed Cable				
F6D6PY-3M1Y	FJ® Plug (keyed Y - orange) to SC multimode duplex patch cord, 3mm jacketed cable (one keyed FJ® Plug on one end and one duplex SC connector on the other end) – 62.5/125µm.	1	1	10
FJ® Plug (Keyed Z) to SC – Multimode Duplex Patch Cords – 3mm Jacketed Cable				
F6D6PZ-3M1Y	FJ® Plug (keyed Z - yellow) to SC multimode duplex patch cord, 3mm jacketed cable (one keyed FJ® Plug on one end and one duplex SC connector on the other end) – 62.5/125µm.	1	1	10
FJ® Plug (Keyed Q) to SC – Multimode Duplex Patch Cords – 3mm Jacketed Cable				
F6D6PQ-3M1Y	FJ® Plug (universal keyed Q - white) to SC multimode duplex patch cord, 3mm jacketed cable (one keyed FJ® Plug on one end and one duplex SC connector on the other end) – 62.5/125µm.	1	1	10
SC to LC – Multimode Duplex Patch Cords – 1.6mm Jacketed Cable				
F6E3-10M1Y	SC to LC multimode duplex patch cord, 1.6mm jacketed cable (one duplex SC connector on one end and one duplex LC connector on the other end) – 62.5/125µm.	1	1	10
ST* to SC – Multimode Duplex Patch Cords – 3mm Jacketed Cable				
F6D2-3M1Y	ST to SC multimode duplex patch cord, 3mm jacketed cable (two ST connectors on one end and one duplex SC connector on the other end) – 62.5/125µm.	1	1	10
FJ® Plug to LC – Multimode Duplex Patch Cords – 1.6mm Jacketed Cable				
F6E6P-10M1Y	FJ® Plug to LC multimode duplex patch cord, 1.6mm jacketed cable (one FJ® Plug on one end and one duplex LC connector on the other end) – 62.5/125µm.	1	1	10

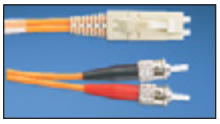
‡To order standard 50/125µm performance (orange cable) patch cords, replace the 6 in the part number (F6D3-3M1) with a 5 (F5D3-3M1).
^Additional lengths and availability: Patch cords are available in 1m – 10m lengths in 1m increments, and 15m, 20m, 25m and 30m lengths. Pigtails are available in 1m, 2m, and 3m lengths. To order lengths other than 1m, replace the 1 after the M (F6D3-3M1Y) with the desired length (F6D3-3M2Y for 2m length). The above lengths are stock items. For other lengths or male MT-RJs, contact Customer Service for actual lead times.

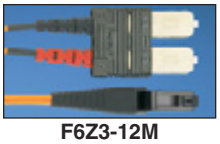
Table continued on page C2.50

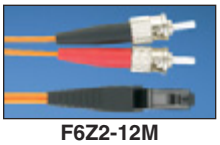
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

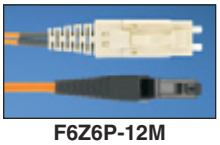
OPTI-CORE® Multimode 62.5/125µm (OM1) or 50/125µm (OM2) Fiber Optic Patch Cords and Pigtails‡ (continued)


F6D6P-3M*Y


F6D6P-2M*Y


F6Z3-12M


F6Z2-12M


F6Z6P-12M

Part Number	Part Description	Length (m)^	Std. Pkg. Qty.	Std. Ctn. Qty.
FJ® Plug to SC – Multimode Duplex Patch Cords – 3mm Jacketed Cable				
F6D6P-3M1Y	FJ® Plug to SC multimode duplex patch cord, 3mm jacketed cable (one FJ® Plug on one end and one duplex SC connector on the other end) – 62.5/125µm.	1	1	10
FJ® Plug to ST – Multimode Duplex Patch Cords – 3mm Jacketed Cable				
F6D6P-2M1Y	FJ® Plug to ST multimode duplex patch cord, 3mm jacketed cable (one FJ® Plug on one end and two ST connectors on the other end) – 62.5/125µm.	1	1	10
SC to MT-RJ – Multimode Duplex Patch Cords – 1.8mm Jacketed Cable				
F6Z3-12M1	SC to female MT-RJ multimode duplex patch cord, 1.8mm jacketed cable (one duplex SC connector on one end and one female MT-RJ connector on the other end) – 62.5/125µm.	1	1	10
ST to MT-RJ – Multimode Duplex Patch Cords – 1.8mm Jacketed Cable				
F6Z2-12M1	ST to female MT-RJ multimode duplex patch cord, 1.8mm jacketed cable (two ST connectors on one end and one female MT-RJ connector on the other end) – 62.5/125µm.	1	1	10
FJ® Plug to MT-RJ – Multimode Duplex Patch Cords – 1.8mm Jacketed Cable				
F6Z6P-12M1	FJ® Plug to female MT-RJ multimode duplex patch cord, 1.8mm jacketed cable (one FJ ® Plug on one end and one female MT-RJ connector on the other end) – 62.5/125µm.	1	1	10

‡To order standard 50/125µm performance (orange cable) patch cords, replace the 6 in the part number (F6D3-3M1) with a 5 (F5D3-3M1).
^Additional lengths and availability: Patch cords are available in 1m – 10m lengths in 1m increments, and 15m, 20m, 25m and 30m lengths. Pigtails are available in 1m, 2m, and 3m lengths. To order lengths other than 1m, replace the 1 after the M (F6D3-3M1Y) with the desired length (F6D3-3M2Y for 2m length). The above lengths are stock items. For other lengths or male MT-RJs, contact Customer Service for actual lead times.

Cable Labels for OPTI-CORE® Multimode (OM1 and OM2) Fiber Optic Patch Cords and Pigtails



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Cord Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
All F6S, F6E, F5S and F5E parts	**S100X160YAJ and NWSLC-3Y‡**	**S100X150VATY and NWSLC-3Y‡**	**S100X160VAC and NWSLC-3Y‡**	**T100X000CBC-BK and NWSLC-3Y**
All F6D, F6Z, F5D and F5Z parts	**S100X220YAJ and NWSLC-7Y‡**	**S100X225VATY and NWSLC-7Y‡**	**S100X220VAC and NWSLC-7Y‡**	**T100X000CBC-BK and NWSLC-7Y**

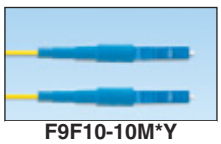
For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For complete information on fiber optic cable identification solutions, reference page C2.55.
*MTP is a registered trademark of US Conec Ltd.

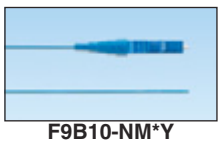
Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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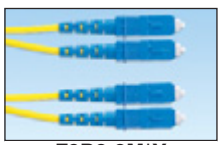
OPTI-CORE® Singlemode 9/125µm (OS1) Fiber Optic Patch Cords and Pigtails

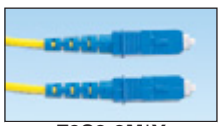
- Available in riser (OFNR) or plenum (OFNP) flame ratings; part numbers listed are for OFNR (F9E10-10M1Y)
- For OFNP, place a P after the X in the part number and drop the Y (F9PE10-10M1)
- Pass all TIA/EIA-568-B.3 performance requirements
- 100% factory inspected end face geometry in compliance with Telcordia GR-326-CORE, Issue 3
- Typical insertion loss per connection: 0.25dB
- UPC polished (55dB minimum return loss)
- Factory terminated and 100% tested for insertion loss and return loss
- Insertion loss and return loss data recorded for every singlemode patch cord
- Lifetime traceability of test data to a Q.C. number on each patch cord
- Highest quality flame retardant fiber optic cable with tight-buffered coating on each optical fiber

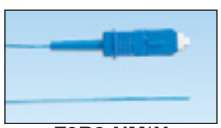

F9E10-10M*Y

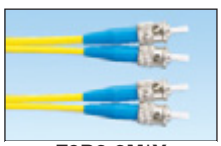

F9F10-10M*Y

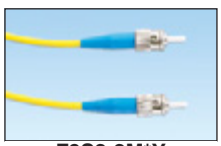

F9B10-NM*Y

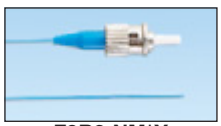

F9D3-3M*Y


F9S3-3M*Y

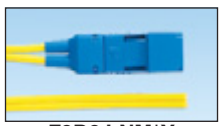

F9B3-NM*Y


F9D2-2M*Y


F9S2-2M*Y


F9B2-NM*Y


F9D6P-6PM*Y


F9D6J-NM*Y

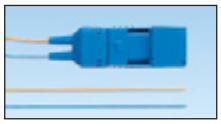
Part Number	Part Description	Length (m)^	Std. Pkg. Qty.	Std. Ctn. Qty.
LC to LC – Singlemode Duplex Patch Cords – 1.6mm Jacketed Cable				
F9E10-10M1Y	LC to LC singlemode duplex patch cord, 1.6mm jacketed cable (one duplex LC connector on each end) – 9/125µm.	1	1	10
LC to LC – Singlemode Simplex Patch Cords – 1.6mm Jacketed Cable				
F9F10-10M1Y	LC to LC singlemode simplex patch cord, 1.6mm jacketed cable (one LC connector on each end) – 9/125µm.	1	1	10
LC to Pigtail – Singlemode Simplex Pigtails – 900µm Buffered Fiber				
F9B10-NM1Y	LC to pigtail singlemode simplex pigtail, 900µm buffered fiber (one LC connector on one end and open on the other end) – 9/125µm.	1	1	10
SC to SC – Singlemode Duplex Patch Cords – 3mm Jacketed Cable				
F9D3-3M1Y	SC to SC singlemode duplex patch cord, 3mm jacketed cable (two SC connectors on each end) – 9/125µm.	1	1	10
SC to SC – Singlemode Simplex Patch Cords – 3mm Jacketed Cable				
F9S3-3M1Y	SC to SC singlemode simplex patch cord, 3mm jacketed cable (one SC connector on each end) – 9/125µm.	1	1	10
SC to Pigtail – Singlemode Simplex Pigtails – 900µm Buffered Fiber				
F9B3-NM1Y	SC to pigtail singlemode simplex pigtail, 900µm buffered fiber (one SC connector on one end and open on the other end) – 9/125µm.	1	1	10
ST to ST – Singlemode Duplex Patch Cords – 3mm Jacketed Cable				
F9D2-2M1Y	ST to ST singlemode duplex patch cord, 3mm jacketed cable (two ST connectors on each end) – 9/125µm.	1	1	10
ST to ST – Singlemode Simplex Patch Cords – 3mm Jacketed Cable				
F9S2-2M1Y	ST to ST singlemode simplex patch cord, 3mm jacketed cable (one ST connector on each end) – 9/125µm.	1	1	10
ST to Pigtail – Singlemode Simplex Pigtails – 900µm Buffered Fiber				
F9B2-NM1Y	ST to pigtail singlemode simplex pigtail, 900µm buffered fiber (one ST connector on one end and open on the other end) – 9/125µm.	1	1	10
FJ® Plug to FJ® Plug – Singlemode Duplex Patch Cords – 3mm Jacketed Cable				
F9D6P-6PM1Y	FJ® Plug to FJ® Plug singlemode duplex patch cord, 3mm jacketed cable (one FJ® Plug on each end) – 9/125µm.	1	1	10
FJ® Jack Module to Pigtail – Singlemode Duplex Pigtails – 3mm Jacketed Cable				
F9D6J-NM1Y	FJ® Jack Module to pigtail singlemode duplex pigtail, 3mm jacketed cable (one FJ® Jack Module on one end and open on the other end) – 9/125µm.	1	1	10

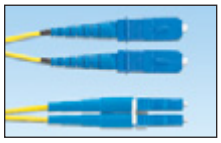
^Additional lengths and availability: Patch cords are available in 1m – 10m lengths in 1m increments, and 15m, 20m, 25m and 30m lengths. Pigtails are available in 1m, 2m, and 3m lengths. To order lengths other than 1m, replace the 1 after the M (F9D3-3M1Y) with the desired length (F9D3-3M2Y for 2m length). The above lengths are stock items. For other lengths, contact Customer Service for actual lead time.

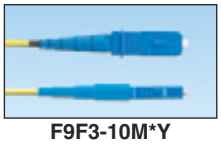
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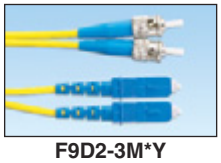
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OPTI-CORE® Singlemode 9/125µm (OS1) Fiber Optic Patch Cords and Pigtails (continued)

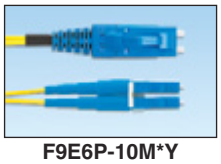

F9B6J-NM*Y

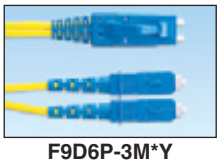

F9E3-10M*Y


F9F3-10M*Y


F9D2-3M*Y


F9S2-3M*Y


F9E6P-10M*Y


F9D6P-3M*Y

Part Number	Part Description	Length (m)^	Std. Pkg. Qty.	Std. Ctn. Qty.
FJ® Jack Module to Pigtail – Singlemode Duplex Pigtails – 900µm Buffered Fiber				
F9B6J-NM1Y	FJ® Jack Module to pigtail singlemode duplex pigtail, 900µm buffered fiber (one FJ® Jack Module on one end and open on the other end) – 9/125µm.	1	1	10
SC to LC – Singlemode Duplex Patch Cords – 1.6mm Jacketed Cable				
F9E3-10M1Y	SC to LC singlemode duplex patch cord, 1.6mm jacketed cable (two SC connectors on one end and one duplex LC connector on the other end) – 9/125µm.	1	1	10
SC to LC – Singlemode Simplex Patch Cords – 1.6mm Jacketed Cable				
F9F3-10M1Y	SC to LC singlemode simplex patch cord, 1.6mm jacketed cable (one SC connector on one end and one LC connector on the other end) – 9/125µm.	1	1	10
ST to SC – Singlemode Duplex Patch Cords – 3mm Jacketed Cable				
F9D2-3M1Y	ST to SC singlemode duplex patch cord, 3mm jacketed cable (two ST connectors on one end and two SC connectors on the other end) – 9/125µm.	1	1	10
ST to SC – Singlemode Simplex Patch Cord – 3mm Jacketed Cable				
F9S2-3M1Y	ST to SC singlemode simplex patch cord, 3mm jacketed cable (one ST connector on one end and one SC connector on the other end) – 9/125µm.	1	1	10
FJ® Plug to LC – Singlemode Duplex Patch Cords – 1.6mm Jacketed Cable				
F9E6P-10M1Y	FJ® Plug to LC singlemode duplex patch cord, 1.6mm jacketed cable (one FJ® Plug on one end and one duplex LC connector on the other end) – 9/125µm.	1	1	10
FJ® Plug to SC – Singlemode Duplex Patch Cords – 3mm Jacketed Cable				
F9D6P-3M1Y	FJ® Plug to SC singlemode duplex patch cord, 3mm jacketed cable (one FJ® Plug on one end and two SC connectors on the other end) – 9/125µm.	1	1	10

^Additional lengths and availability: Patch cords are available in 1m – 10m lengths in 1m increments, and 15m, 20m, 25m and 30m lengths. Pigtails are available in 1m, 2m, and 3m lengths. To order lengths other than 1m, replace the 1 after the M (F9D3-3M1Y) with the desired length (F9D3-3M2Y for 2m length). The above lengths are stock items. For other lengths, contact Customer Service for actual lead time.

Cable Labels for OPTI-CORE® Singlemode 9/125µm (OS1) Fiber Optic Patch Cords and Pigtails



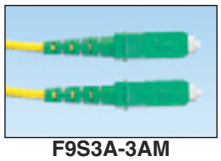
Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Cord Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
All F9F parts	S100X160YAJ and NWSLC-2Y‡	S100X150VATY and NWSLC-2Y‡	S100X160VAC and NWSLC-2Y‡	T100X000CBC-BK and NWSLC-2Y
All F9S and F9E parts	S100X160YAJ and NWSLC-3Y‡	S100X150VATY and NWSLC-3Y‡	S100X160VAC and NWSLC-3Y‡	T100X000CBC-BK and NWSLC-3Y
All F9D parts	S100X220YAJ and NWSLC-7Y‡	S100X225VATY and NWSLC-7Y‡	S100X220VAC and NWSLC-7Y‡	T100X000CBC-BK and NWSLC-7Y

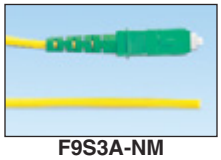
For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For complete information on fiber optic cable identification solutions, reference page B2.48.

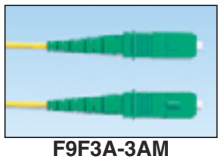
Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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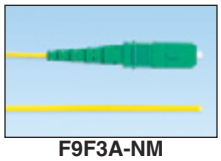
OPTI-CORE® APC Fiber Optic Patch Cords and Pigtails

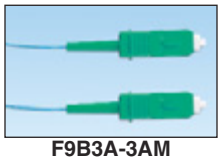
- Pass all TIA/EIA-568-B.3 performance requirements
- 100% factory inspected end face geometry in compliance with Telcordia GR-326-CORE, Issue 3
- Typical insertion loss per connection: 0.15dB
- UPC polished (65dB minimum return loss)
- Factory terminated and 100% tested for insertion loss and return loss
- Insertion loss and return loss data recorded for every APC patch cord
- Lifetime traceability of test data to a Q.C. number on each patch cord
- Highest quality flame retardant fiber optic cable with tight-buffered coating on each optical fiber

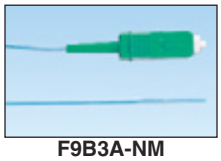

F9S3A-3AM


F9S3A-NM


F9F3A-3AM


F9F3A-NM

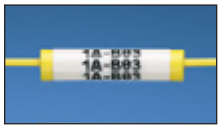

F9B3A-3AM


F9B3A-NM

Part Number	Part Description	Length (m)^	Std. Pkg. Qty.	Std. Ctn. Qty.
SC APC to SC APC – APC Simplex Patch Cords – 3mm Jacketed Cable				
F9S3A-3AM1	SC APC to SC APC singlemode simplex patch cord, 3mm jacketed cable (one SC APC connector on each end) – 9/125µm.	1	1	10
SC APC to Pigtail – APC Simplex Pigtails – 3mm Jacketed Cable				
F9S3A-NM1	SC APC to pigtail singlemode simplex pigtail, 3mm jacketed cable (one SC APC connector on one end and open on the other end) – 9/125µm.	1	1	10
SC APC to SC APC – APC Simplex Patch Cords – 1.6mm Jacketed Cable				
F9F3A-3AM1	SC APC to SC APC singlemode simplex patch cord, 1.6mm jacketed cable (one SC APC connector on each end) – 9/125µm.	1	1	10
SC APC to Pigtail – APC Simplex Pigtails – 1.6mm Jacketed Cable				
F9F3A-NM1	SC APC to pigtail singlemode simplex pigtail, 1.6mm jacketed cable (one SC APC connector on one end and open on the other end) – 9/125µm.	1	1	10
SC APC to SC APC – APC Simplex Patch Cords – 900µm Buffered Fiber				
F9B3A-3AM1	SC APC to SC APC singlemode simplex patch cord, 900µm buffered fiber (one SC APC connector on each end) – 9/125µm.	1	1	10
SC APC to Pigtail – APC Simplex Pigtails – 900µm Buffered Fiber				
F9B3A-NM1	SC APC to pigtail singlemode simplex pigtail, 900µm buffered fiber (one SC APC connector on one end and open on the other end) – 9/125µm.	1	1	10

^Additional lengths and availability: Patch cords are available in 1m, 2m, 3m, 5m and 10m lengths. To order lengths other than 1m, replace the 1 at the end of the part number (F9S3A-3AM1) with the desired length (F9S3A-3AM2 for 2m length). The above lengths are stock items. For other lengths, contact Customer Service for actual lead times.

Cable Labels for OPTI-CORE® APC Fiber Optic Patch Cords and Pigtails



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Cord Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	**PANTHER™ LS8E Hand-Held Printer Label**	**COUGAR™ LS9 Hand-Held Printer Label**
All F9F parts	**S100X160YAJ and NWSLC-2Y‡**	**S100X150VATY and NWSLC-2Y‡**	**S100X160VAC and NWSLC-2Y‡**	**T100X000CBC-BK and NWSLC-2Y**
All F9S parts	**S100X160YAJ and NWSLC-3Y‡**	**S100X150VATY and NWSLC-3Y‡**	**S100X160VAC and NWSLC-3Y‡**	**T100X000CBC-BK and NWSLC-3Y**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.
‡For complete information on fiber optic cable identification solutions, reference page B2.48.

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250 Micron Fiber Build-Up Tube Kit

- Includes 100 build-up tubes and supplemental instructions for terminating *PANDUIT* field polish, *OPTI-CRIMP®*, or *OPTICAM®* Fiber Optic Connectors onto 250µm coated fiber
- Used with 900µm boots included with connectors and the current fiber optic termination kit



Part Number	Part Description	Std. Pkg. Qty.
F250BT-C	250 micron fiber build-up tube kit; includes 100 build-up tubes and supplemental installation instructions.	100

Furcation Kits

- Used to build up 900µm fiber to 3mm jacketed fiber to strengthen and protect the fiber
- Include furcation tubing with strength members and heat shrink
- Length: 1m



FK2BJ

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
FK2BJ	Build up 900µm fiber to 3mm jacketed fiber; for two fibers.	1	10
FK4BJ	Build up 900µm fiber to 3mm jacketed fiber; for four fibers.	1	10

Fan-Out Kits

- Used to build up 250µm fiber to 900µm loose buffered coating size for connector termination
- Include 900µm hollow tubing and plastic housings
- Include adhesive tape for mounting
- Include TEFLON* powder for easy insertion of fibers
- Length: 1m (39.37")



FO12CB

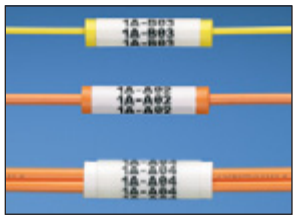
Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
FO6CB	Build up 250µm fiber to 900µm loose buffered coating size; for six fibers.	1	10
FO12CB	Build up 250µm fiber to 900µm loose buffered coating size; for twelve fibers.	1	10

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

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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LABELCORE™ Fiber Optic Cable Identification System

- Provides a larger labeling surface on small cables allowing legends to be clearly seen
- Sleeve is made of flexible PVC material
- Locate sleeve on straight section of cable at least 2.00" from fiber boot



Part Number	Part Description	Std. Pkg. Qty.*	Std. Ctn. Qty.
NWSLC-2Y	Yellow, cable identification sleeve for 2mm simplex fiber cable.	100	1000
NWSLC-3Y	Orange, cable identification sleeve for 3mm simplex fiber cable.	100	1000
NWSLC-7Y	White, cable identification sleeve for 3mm duplex fiber cable.	100	1000

*Order number of sleeves required.

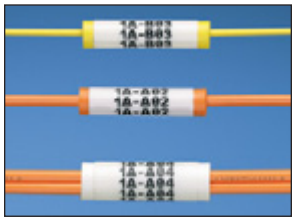


Apply *LABELCORE*™ Sleeve to cable



Wrap self-laminating label around *LABELCORE*™ Sleeve

Self-Laminating Labels for *LABELCORE*™ Fiber Optic Cable Identification System



Suggested Label Solutions for TIA/EIA-606-A Compliance				
LABELCORE™ Sleeve Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	*PANTHER*™ LS8E Hand-Held Printer Label	*COUGAR*™ LS9 Hand-Held Printer Label
NWSLC-2Y	**S100X160YAJ**	**S100X150VATY**	**S100X160VAC**	**T100X000CBC-BK**
NWSLC-3Y				
NWSLC-7Y	**S100X220YAJ**	**S100X225VATY**	**S100X220VAC**	**T100X000CBC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

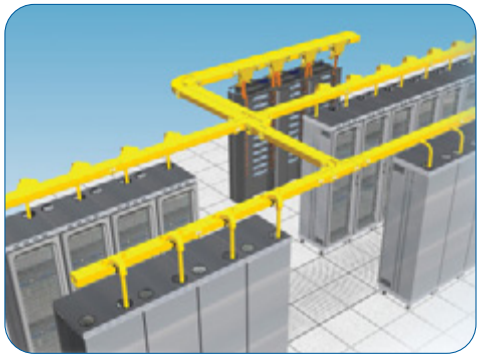
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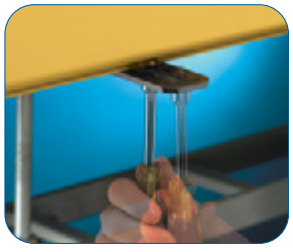
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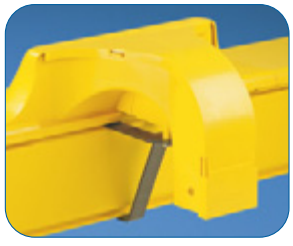
FIBERRUNNER® ROUTING SYSTEMS

PANDUIT provides innovative solutions for routing fiber optic and high performance copper cabling to and between equipment racks within a data center, telecommunications room, or service provider facility. Routing products such as the *FIBERRUNNER*® Routing System are critical factors in your ability to quickly install, easily implement moves, adds, and changes and maintain the integrity of your fiber and copper cabling plant in order to maximize long-term performance.











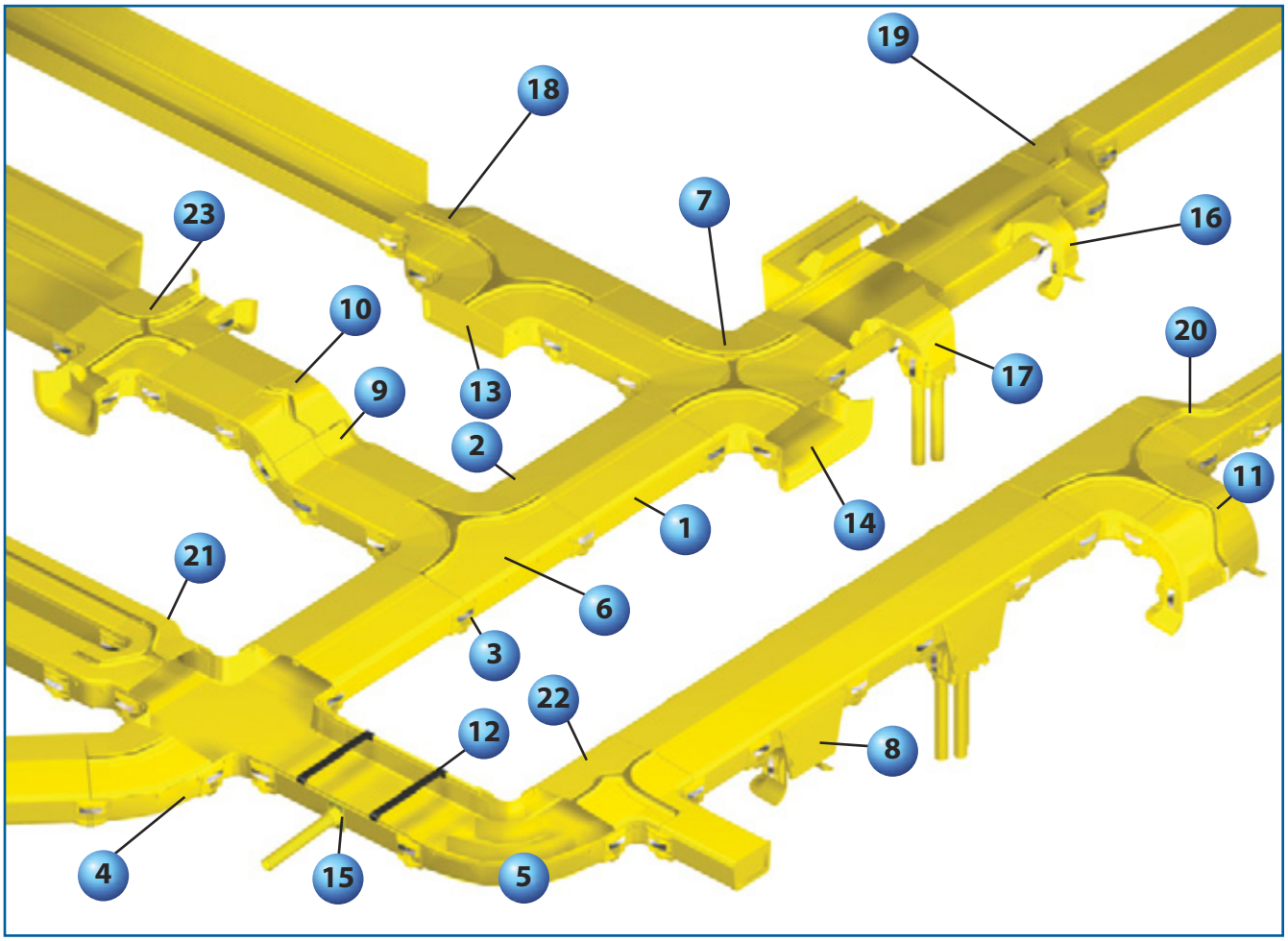
- **Robust, large capacity 12x4 and 6x4 systems to handle large cable counts; 4x4 and 2x2 systems for use with smaller cable counts**
- **Hinged channel cover and split fitting covers protect cabling and provide easy access for future cabling revisions and additions**
- ***QUIKLOCK*™ assembly features eliminate or minimize the need for tools to assemble the system; *QUIKLOCK*™ Couplers and Brackets require less than five seconds to mechanically secure components**
- **Fittings provide minimum 2" (50.8mm) bend radius to protect against signal loss due to excessive cable bends**
- **Multiple spillout options provide versatility to make transitions to various equipment and rack configurations**
- **Compatible with *PANDUIT*® *FIBER-DUCT*™ 4x4 and 2x2 Routing Systems, cable management, and racks**

The *FIBERRUNNER*® 12x4, 6x4, 4x4 and 2x2 Routing Systems are comprised of channel, couplers, fittings and brackets designed to segregate, route, and protect fiber optic and high performance copper cabling.

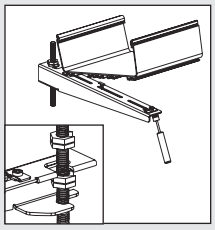
A. System Overview
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E. Industrial
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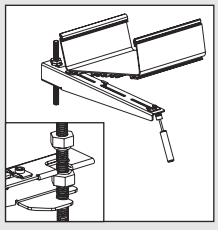
12x4 FIBERRUNNER Routing System Roadmap



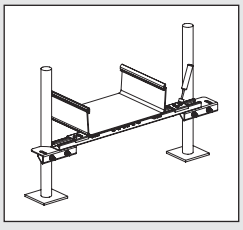
12x4 FIBERRUNNER® Mounting Brackets



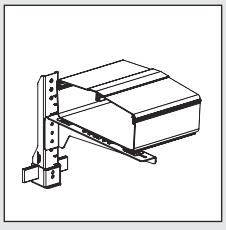
FR12TRBE58 – Existing Threaded Rod QUIKLOCK™ Bracket (page C3.12)



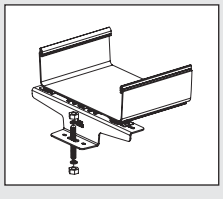
FR12TRBN58 – New Threaded Rod QUIKLOCK™ Bracket (page C3.12)



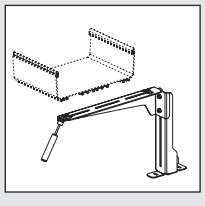
FR12USB – Underfloor Pedestal QUIKLOCK™ Bracket (page C3.12)



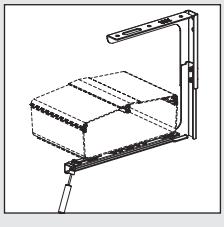
FR12ALB – Adjustable Ladder QUIKLOCK™ Bracket (page C3.12)



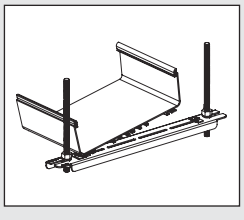
FR12CS58 – Center Support QUIKLOCK™ Bracket (page C3.12)



FR12ACAB – Adjustable Cabinet QUIKLOCK™ Bracket (page C3.13)

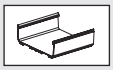


FR12ACB58 – Top Support Adjustable 'C' QUIKLOCK™ Bracket (page C3.12)



FR12TB58 – Trapeze QUIKLOCK™ Bracket (page C3.12)

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1. FR12X4**6 – 12x4 FIBERRUNNER® Channel (page C3.4)



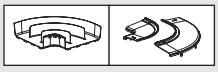
2. FRHC12**6 – 12x4 Snap-On Hinged Cover (page C3.4)



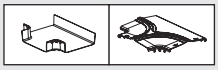
3. FRBC12X4** – 12x4 QUIKLOCK™ Coupler (page C3.5)



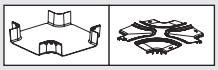
4. FRH4512X4** – 12x4 Horizontal 45° Angle Fitting and FRH45SC12** – Optional Split Cover (page C3.5)



5. FRRA12X4** – 12x4 Horizontal Right Angle Fitting and FRRASC12** Optional Split Cover (page C3.5)



6. FRT12X4** – 12x4 Horizontal Tee Fitting and FRTSC12** – Optional Split Cover (page C3.6)



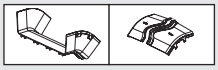
7. FRFWC12x4** – 12x4 4-Way Cross Fitting and FRFWCSC12** – Optional Split Cover (page C3.6)



8. FRVT12x4** – 12x4 Vertical Tee (page C3.9)



9. FRIV4512x4** – 12x4 Inside Vertical 45° Angle Fitting (page C3.7)



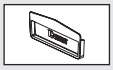
10. FROV4512x4** – 12x4 Outside Vertical 45° Angle Fitting and FROV45SC12** – Optional Split Cover (page C3.7)



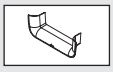
11. FROVRA12x4** – 12x4 Outside Vertical Right Angle Fitting and FROVRASC12** Optional Split Cover (page C3.7)



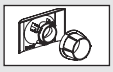
12. FRCR12BL-X – Cable Retainer for 12x4 System (page C3.4)



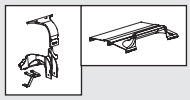
13. FREC12x4** – 12x4 End Cap Fitting (page C3.7)



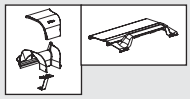
14. FRTR12x4** – 3-Sided BRC Trumpet Spillout for 12x4 Exit (page C3.11)



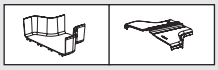
15. FR1.5IDE** – 1-Port Spillout Side Exit to 1.5" (38mm) Inside Diameter Corrugated Tubing (page C3.11)



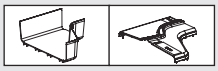
16. FRSP** – Spill-Over Junction with 2x2 Exit and FRSP12C** – Optional Cover for 12x4 System (page C3.9)



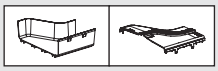
17. FRSP4** – Spill-Over Junction with 4x4 Exit and FRSP412C** Optional Cover for 12x4 System (page C3.10)



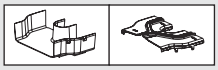
18. FRRF126** – 12x4 to 6x4 FIBERRUNNER® Reducer Fitting and FRRF126SC** – Optional Split Cover (page C3.7)



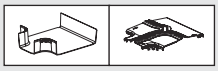
19. FRRF126L** – 12x4 to 6x4 Transition Left Reducer Fitting and FRRF126LSC** – Optional Split Cover (page C3.8)



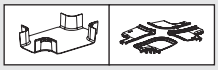
20. FRRF126R** – 12x4 to 6x4 Transition Right Reducer Fitting and FRRF126RSC** – Optional Split Cover (page C3.8)



21. FRY126** – Y-Reducer from 12x4 to two 6x4 Exit and FRY126SC** – Optional Split Cover (page C3.8)



22. FRT12x4W6** – 12x4 Horizontal Tee with 6x4 Exit and FRTSC12W6** – Optional Split Cover (page C3.6)



23. FRFWC12x4W6** – 12x4 4-Way Cross Fitting with 6x4 Exits and FRFWCSC12W6** – Optional Split Cover (page C3.6)

**Available colors include: YL (Yellow), OR (Orange), and BL (Black).

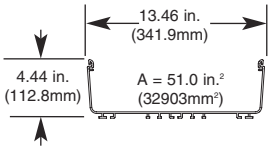
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c UL us LISTED 12x4 FIBERRUNNER® Routing System

Cable Fills for 12x4 FIBERRUNNER® Cable Routing System

The maximum amounts may vary according to the cable fill installation methods, straightness of cables, etc.





12x4 FIBERRUNNER® Cable Routing System							
Fill/Pile Up	Internal Area In.²	Diameter 1.6mm .063"	Diameter 2.0mm .079"	Diameter 3.0mm .118"	Augmented Cat. 6 23 AWG/UTP CM Diameter 9mm .354"	Fiber Optic Ribbon Interconnect Cable Diameter 5.20mm .205"	Category 6 Diameter 6.35mm .25"
40% Fill							
2" Pile Up	25.7	3299	2111	938	104	311	209
3" Pile Up	38.8	4980	3187	1417	158	470	316
4" Pile Up	51	6546	4189	1862	207	618	416
50% Fill							
2" Pile Up	25.7	4124	2639	1173	131	389	262
3" Pile Up	38.8	6225	3984	1771	197	588	395
4" Pile Up	51	8183	5237	2327	259	773	519
60% Fill							
2" Pile Up	25.7	4948	3167	1407	157	467	314
3" Pile Up	38.8	7470	4781	2125	237	705	474
4" Pile Up	51	9819	6284	2793	311	927	623

Channel cutting instructions: For optimum results, use FRCUT miter box and saw. For larger quantities use a plastic cutting saw blade for clean, burr-free cuts. Recommend: Carbide 80T and 100T; .090" thickness, .125" kerf.

12x4 FIBERRUNNER® Routing System – Channel and Cover

- Robust, large capacity 12x4 system ideal for use with large cable counts
- Multiple spillout options provide versatility to mate to various equipment and rack configurations
- QUIKLOCK™ Couplers and Brackets reduce system installation time dramatically
- Channel, covers, fittings and other non-metallic system components made from V-0 flame class rated material
- Compatible with all sizes of *PANDUIT® FIBERRUNNER®* and *PANDUIT® FIBER-DUCT™* Routing Systems, cable management, and racks
- Compliant with the applicable tests in Telcordia GR-63-CORE Network Equipment Building Systems (NEBS) Level 3



FR12X4



FRHC12



FRCR12BL-X

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
12x4 FIBERRUNNER® Channel			
FR12X4YL6	Used to carry the cables horizontally throughout the system. Accepts cable retainers FRCR12BL-X or hinged cover FRHC12YL6. Use QUIKLOCK™ Coupler FRBC12X4YL to attach channel and/or fittings.	6	12
12x4 Snap-On Hinged Cover			
FRHC12YL6	Optional snap-on hinged cover for channel FR12X4YL6. Can be folded down for height restricted areas.	6	12
Cable Retainer for 12x4 System			
FRCR12BL-X	Cable retainer holds cable in the channel when cover is not used. Install anywhere on channel, near the coupler or every 18" (457mm). Black color only.	10	100

For other colors replace YL (Yellow) with OR (Orange) or BL (Black).
Order number of feet required, in multiples of standard 6' length increments.
Order number of cable retainers required, in multiples of Standard Package Quantity.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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12x4 *FIBERRUNNER®* *QUIKLOCK™* Coupler

- Pre-assembled to provide fast mechanical assembly of components
- No tools required for installation; bolts loosen for component disassembly



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
FRBC12X4YL	Pre-assembled coupler quickly joins two sections of channel and/or fittings. Mechanically attaches without tightening bolts. Bolts release using 3/8" nut driver to allow coupler to be removed if necessary.	1	5

For a bulk package of ten couplers, order FRBC12X4YL-X.
For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

12x4 *FIBERRUNNER®* System Fittings

- Minimum 2" (50.8mm) bend radius control fittings
- Protects against signal loss and performance degradation
- Assemble using FRBC *QUIKLOCK™* Couplers
- Optional split covers snap onto each fitting
- Covers feature 3/4" (19mm) gap to allow cable to be laid in



FRRA12X4



FRRASC12



FRH4512X4



FRH45SC12

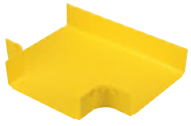
Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
12x4 Horizontal Right Angle Fitting				
FRRA12X4YL	Attaches to 12x4 channel and/or fitting to create a 90° horizontal turn from a straight horizontal run. Inside divider walls manage cables routed around horizontal right angles. Accepts optional split cover FRRASC12YL.	(2 pcs.) FRBC12X4YL	1	—
Split Cover for 12x4 Horizontal Right Angle Fitting				
FRRASC12YL	Optional split cover for the horizontal right angle fitting FRRA12X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5
12x4 Horizontal 45° Angle Fitting				
FRH4512X4YL	Attaches to 12x4 channel and/or fitting to create a 45° horizontal turn from a straight horizontal run. Accepts optional split cover FRH45SC12YL.	(2 pcs.) FRBC12X4YL	1	—
Split Cover for 12x4 Horizontal 45° Angle Fitting				
FRH45SC12YL	Optional split cover for the horizontal 45° angle fitting FRH4512X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or removes cables.	—	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

Table continues on page C3.6

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12x4 FIBERRUNNER® System Fittings (continued)



FRT12X4



FRTSC12



FRT12X4W6



FRTSC12W6



FRFWC12X4



FRFWCSC12



FRFWC12X4W6



FRFWCSC12W6

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
12x4 Horizontal Tee Fitting				
FRT12X4YL	Attaches to 12x4 channel and/or fittings to create a 90° horizontal branch with a 12x4 exit from straight horizontal run. Accepts optional split cover FRTSC12YL.	(3 pcs.) FRBC12X4YL	1	—
Split Cover for 12x4 Horizontal Tee Fitting				
FRTSC12YL	Optional split cover for the horizontal tee fitting FRT12X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5
12x4 Horizontal Tee with 6x4 Exit				
FRT12X4W6YL	Attaches to 12x4 channel and/or fittings to create a 90° horizontal branch with a 6x4 exit from straight horizontal run. Accepts optional split cover FRTSC12W6YL.	(2 pcs.) FRBC12X4YL (1 pc.) FRBC6X4YL	1	—
Split Cover for 12x4 Horizontal Tee with 6x4 Exit				
FRTSC12W6YL	Optional split cover for the horizontal tee with 6x4 exit fitting FRT12X4W6YL. Snap-on feature allows cover to be installed and removed without tools. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5
12x4 4-Way Cross Fitting				
FRFWC12X4YL	Attaches to 12x4 channel and/or fittings to create a horizontal 4-way cross intersection with two 12x4 exits. Accepts optional split cover FRFWCSC12YL.	(4 pcs.) FRBC12X4YL	1	—
Split Cover for 12x4 4-Way Cross Fitting				
FRFWCSC12YL	Optional split cover for the 4-way cross fitting FRFWC12X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5
12x4 4-Way Cross Fitting with 6x4 Exits				
FRFWC12X4W6YL	Attaches to 12x4 channel and/or fittings to create a horizontal 4-way cross intersection with two 6x4 exits. Accepts optional split cover FRFWCSC12W6YL.	(2 pcs.) FRBC12X4YL (2 pcs.) FRBC6X4YL	1	—
Split Cover for 12x4 4-Way Cross Fitting with 6x4 Exits				
FRFWCSC12W6YL	Optional split cover for the 4-way cross fitting FRFWC12X4W6YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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12x4 *FiberRunner*® System Fittings (continued)



FREC12X4



FRIV4512X4



FROV4512X4



FROV45SC12



FROVRA12X4



FROVRASC12



FRRF126



FRRF126SC

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
12x4 End Cap Fitting				
FREC12X4YL	Used for closing off open ends of the channel or fittings. No coupler required. Push-on installation.	—	1	5
12x4 Inside Vertical 45° Angle Fitting				
FRIV4512X4YL	Attaches to 12x4 channel and/or fitting to create a 45° upward angle from a straight horizontal run. Used with outside vertical 45° angle fitting FROV4512X4YL to change level of a straight horizontal run. Includes split cover.	(2 pcs.) FRBC12X4YL	1	—
12x4 Outside Vertical 45° Angle Fitting				
FROV4512X4YL	Attaches to 12x4 channel and/or fitting to create a 45° downward angle from a straight horizontal run. Used with inside vertical 45° angle fitting FRIV4512X4YL to change level of a horizontal run. Accepts optional split cover FROV45SC12YL.	(2 pcs.) FRBC12X4YL	1	—
Split Cover for 12x4 Outside Vertical 45° Angle Fitting				
FROV45SC12YL	Optional split cover for the outside vertical 45° angle fitting FROV4512X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5
12x4 Outside Vertical Right Angle Fitting				
FROVRA12X4YL	Attaches to 12x4 channel and/or fittings to create a 90° vertical turn down from a straight horizontal run. Accepts optional split cover FROVRASC12YL.	(2 pcs.) FRBC12X4YL	1	—
Split Cover for 12x4 Outside Vertical Right Angle Fitting				
FROVRASC12YL	Optional split cover for the outside vertical right angle fitting FROVRA12X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5
12x4 to 6x4 *FiberRunner*® Reducer Fitting				
FRRF126YL	Attaches any 12x4 *FiberRunner*® Fitting or Channel to any 6x4 *FiberRunner*® Fitting or Channel. Accepts split cover FRRF126SCYL.	(1 pc.) FRBC12X4YL (1 pc.) FRBC6X4YL	1	—
Split Cover for 12x4 to 6x4 *FiberRunner*® Reducer Fitting				
FRRF126SCYL	Optional split cover for the reducer fitting FRRF126YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

Table continues on page C3.8

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12x4 *FIBERRUNNER*® System Fittings (continued)



FRY126



FRY126SC



FRRF126R



FRRF126RSC



FRRF126L



FRRF126LSC

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
Y-Reducer from 12x4 to Two 6x4 Exits				
FRY126YL	Attaches any 12x4 *FIBERRUNNER*® Fitting or Channel to two 6x4 *FIBERRUNNER*® Channels. Accepts split cover FRY126SCYL.	(1 pc.) FRBC12X4YL (2 pcs.) FRBC6X4YL	1	—
Split Cover for Y-Reducer from 12x4 to Two 6x4 Exits				
FRY126SCYL	Optional split cover for the Y-reducer fitting FRY126YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 11/16" (17.5mm) opening for easy access to add or remove cables.	—	1	5
12x4 to 6x4 Transition Right Reducer Fitting				
FRRF126RYL	Attaches any 12x4 *FIBERRUNNER*® Fitting or Channel to any 6x4 *FIBERRUNNER*® Fitting or Channel while transitioning to the right. Accepts split cover FRRF126RSCYL.	(1 pc.) FRBC12X4YL (1 pc.) FRBC6X4YL	1	—
Split Cover for 12x4 to 6x4 Transition Right Reducer Fitting				
FRRF126RSCYL	Optional split cover for the transition right reducer fitting FRRF126RYL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 1/2" (12.7mm) opening for easy access to add or remove cables.	—	1	5
12x4 to 6x4 Transition Left Reducer Fitting				
FRRF126LYL	Attaches any 12x4 *FIBERRUNNER*® Fitting or Channel to any 6x4 *FIBERRUNNER*® Fitting or Channel while transitioning to the left. Accepts split cover FRRF126LSCYL.	(1 pc.) FRBC12X4YL (1 pc.) FRBC6X4YL	1	—
Split Cover for 12x4 to 6x4 Transition Left Reducer Fitting				
FRRF126LSCYL	Optional split cover for the transition left reducer fitting FRRF126LYL. Snap-on feature allows cover to be installed and removed with no tools required. Creates 1/2" (12.7mm) opening for easy access to add or remove cables.	—	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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12x4 *FIBERRUNNER*® System Spillouts

- Spill-overs allow safe transition from horizontal to vertical runs
- 2" (50.8mm) bend radius control
- Transition to channel, slotted channel, and corrugated loom tubing
- Spill-over junction fittings can be retro-fitted to existing horizontal runs



FRVT12X4



FRTR6X4



FRIDT6X4



FRHD4KT



TRC4HDBL



FRLPR64BL



FRSP



FRSP12C

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
12x4 Vertical Tee				
FRVT12X4YL	Attaches to 12x4 channel and/or fittings to create a 90° vertical drop from a horizontal run. Hinged door included. Requires coupler to attach FRTR6X4YL or FRIDT6X4YL to vertical exit. Accepts optional snap-on cover FRHC12YL6 in conjunction with channel.	(2 pcs.) FRBC12X4YL (1 pc.) FRBC6X4YL	1	—
3-Sided BRC Trumpet Spillout for 6x4 Exit				
FRTR6X4YL	Used to limit the bend radius of the cable to 2" (50.8mm) when exiting from 6x4 channel, 6x4 horizontal tee fitting, or 6x4 exit on 12x4 vertical tee.	(1 pc.) FRBC6X4YL	1	5
3-Port Spillout to 1.5" (38mm) Inside Diameter Corrugated Tubing				
FRIDT6X4YL	Used to route cable into three separate pieces of 1.5" (38mm) diameter split corrugated tubing. Used with FRVT12X4YL or any 6x4 fitting. Securely holds corrugated split tubing to ensure system integrity and easy access to add or remove cables.	(1 pc.) FRBC6X4YL	1	5
4x4 Hinged Duct Vertical Cable Manager Kit				
FRHD4KTYL	Provides secure, accessible route for cables spilling out from vertical tee to rack mounted equipment. Kit includes 6' length of 4x4 capacity hinged duct, 6' length of 4x4 hinged duct cover, one end cap for 4x4 hinged duct, three FZBA1.5X4 adjustable "Z" brackets, an adapter fitting, six WR4-C wire retainers and all required mounting hardware. Attaches directly to 6x4 and 4x4 vertical tee exit or FRLPR64 low profile reducer.	—	1	—
4x4 Hinged Duct Bend Radius Control Trumpet				
TRC4HDBL	Bend radius control trumpet for exiting at the sidewall of 4" wall heights of type H hinged cover wiring duct channels. Maintains 1" (25.4mm) bend radius control. Black color only.	—	1	10
Low Profile Reducer 6x4 to 4x4 for Vertical Tee				
FRLPR64BL	Assembled into the 12x4 vertical tee FRVT12X4YL. The FRLPR64BL allows for the transition to 4x4 *FIBER-DUCT*™ Channel with minimal space required. No tools required for assembly. Black color only.	—	1	5
Spill-Over Junction with 2x2 Exit				
FRSPYL	Assembles onto 4x4, 6x4, or 12x4 *FIBERRUNNER*® Channel, spilling over the side into a 2x2 vertical channel, fitting, or corrugated tube. Mounts directly to existing installation with no alteration required. Mounting hardware provided for secure attachment.	—	1	—
Cover for Spill-Over Junction with 2x2 Exit for 12x4 Channel				
FRSP12CYL	Used to fully enclose 12x4 channel in conjunction with the spill-over junction FRSPYL. Cover snaps onto the channel base. Hinged feature allows easy access to add or remove cables.	—	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

Table continues on page C3.10

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12x4 FIBERRUNNER® System Spillouts (continued)



FTR2X2



FIDT2X2



FRHD2KT



TRC2HDBL



FRSP4



FRSP412C

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
3-Sided BRC Trumpet Spillout for 2x2 Exit				
FTR2X2YL	Used to limit the bend radius of the cable to 2" (50.8mm) when exiting from a FIBERRUNNER® Spill-Over FRSPYL or from 2x2 FIBER-DUCT™ Channel.	(1 pc.) FBC2X2YL	1	5
1-Port Spillout to 1.5" (38mm) Inside Diameter Corrugated Tubing				
FIDT2X2YL	Used to route cable into one piece of 1.5" (38mm) diameter split corrugated tubing. Used with FIBERRUNNER® Spill-Over FRSPYL, 2x2 FIBER-DUCT™ Fittings, and the 2x2 FIBERRUNNER® Hinged Channel. Securely holds split corrugated tubing to ensure system integrity and easy access to add or remove cables.	(1 pc.) FBC2X2YL	1	5
2x2 Hinged Duct Vertical Cable Manager Kit				
FRHD2KTYL	Provides secure, accessible route for cables spilling out from a vertical tee or spill-over junction to rack mounted equipment. Kit includes 6' length of 2x2 FIBERRUNNER® Hinged Channel H2X2YL6, 6' length of 2x2 snap-on hinged cover HC2YL6, four adjustable "Z" brackets FZBA1.5X4, one FIBERRUNNER® 2x2 End Cap FHDEC2X2YL, six hinged duct 2" wire retainers WR2H-C and all required mounting hardware. Attaches to 2x2 vertical tee exit or spill-over junction with a 2x2 exit with a 2x2 QUIKLOCK™ Coupler FBC2X2YL. Also attaches directly to 4x4 or 6x4 vertical tee exits with low profile reducer FRLPR42BL. Yellow and orange colors only.	—	1	—
2x2 FIBERRUNNER® Bend Radius Control Trumpet				
TRC2HDBL	Bend radius control trumpet for exiting at the sidewall of 2" wall heights of type H hinged cover wiring duct channels. Maintains 1" (25.4mm) bend radius control. Black color only.	—	1	10
Spill-Over Junction with 4x4 Exit				
FRSP4YL	Assembles onto 4x4, 6x4, or 12x4 FIBERRUNNER® Channel, spilling over the side into a 4x4 vertical exit. Requires coupler to attach 4x4 FIBERRUNNER® Channel and Fittings to the vertical exit. Mounts directly to existing installation with no alteration required. Mounting hardware provided for secure attachment.	(1 pc.) FRBC4X4YL	1	—
Cover for Spill-Over Junction with 4x4 Exit for 12x4 Channel				
FRSP412CYL	Used to fully enclose the 12x4 channel in conjunction with the spill-over junction FRSP4YL. Cover snaps onto the channel base. Hinged feature allows easy access to add or remove cables.	—	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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12x4 FIBERRUNNER® System Spillouts (continued)



FRTR4X4



FRIDT4X4



FR1.5IDE



FRTR12X4

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
3-Sided BRC Trumpet Spillout for 4x4 FIBERRUNNER® Exit				
FRTR4X4YL	Used to limit the bend radius of the cable to 2" (50.8mm) when exiting from 4x4 FIBERRUNNER® Channel or a 4x4 FIBERRUNNER® Horizontal Tee.	(1 pc.) FRBC4X4YL	1	5
2-Port Spillout to 1.5" (38mm) Inside Diameter Corrugated Tubing				
FRIDT4X4YL	Used to route cable into one or two pieces of 1.5" (38mm) diameter split corrugated tubing. Requires coupler to be used with 4x4 FIBERRUNNER® Fitting. Used with any 4x4 FIBERRUNNER® Fitting. Securely holds corrugated split tubing to ensure system integrity and easy access to add or remove cables.	(1 pc.) FRBC4X4YL	1	5
1-Port Spillout Side Exit to 1.5" (38mm) Inside Diameter Corrugated Tubing				
FR1.5IDEYL	Used to route cable into 1.5" (38mm) diameter split corrugated tubing directly through a hole cut in the side wall of the 4x4, 6x4, and 12x4 FIBERRUNNER® Channel or 4x4 FIBER-DUCT™ Channel. Provides 1" (25.4mm) bend radius control at the exit. Securely holds split corrugated tubing to ensure system integrity and easy access to add or remove cables. Includes drilling template.	—	1	5
3-Sided BRC Trumpet Spillout for 12x4 Exit				
FRTR12X4YL	Used to limit the bend radius of the cable to 2" (50.8mm) when exiting from the 12x4 channel or a 12x4 horizontal tee.	(1 pc.) FRBC12X4YL	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

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12x4 FIBERRUNNER® Mounting Brackets



FR12TRBE58
FR12TRBE58M



FR12TRBN58
FR12TRBN58M



FR12USB



FR12ALB



FR12CS12
FR12CS58
FR12CS12M
FR12CS58M



FR12ACB12
FR12ACB58
FR12ACB12M
FR12ACB58M



FR12TB12
FR12TB58
FR12TB12M
FR12TB58M

Part Number	Part Description	For Threaded Rod Size	Std. Pkg. Qty.	Std. Ctn. Qty.
Existing Threaded Rod QUIKLOCK™ Bracket for 12x4 System				
FR12TRBE58	Used to support the 12x4 system from existing threaded rod installations. Bracket is secured to threaded rod with two split nuts. The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps.	5/8"	1	—
FR12TRBE58M		16mm	1	—
New Threaded Rod QUIKLOCK™ Bracket for 12x4 System				
FR12TRBN58	Used to support the 12x4 system from new threaded rod installations. Bracket is secured to threaded rod with two split nuts. The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps.	5/8"	1	—
FR12TRBN58M		16mm	1	—
Underfloor Pedestal QUIKLOCK™ Bracket for 12x4 System				
FR12USB	Used to support the 12x4 system by attaching to underfloor pedestals. (Contains all necessary hardware.) Use on pedestals up to 2" in diameter. The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps.	—	1	—
Adjustable Ladder QUIKLOCK™ Bracket for 12x4 System				
FR12ALB	Used to support the 12x4 system attaching to any 3/8" (9.5mm) x 1 1/2" (38.1mm) or 3/8" (9.5mm) x 2" (50.8mm) ladder rack rail. Adjustable to nine incremental positions from 4" (101mm) to 12" (305mm) above or below the ladder rack. No threaded rod required. The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps.	—	1	—
Center Support QUIKLOCK™ Bracket for 12x4 System				
FR12CS12	Used to support the 12x4 system from below with new threaded rod. Bracket is secured to threaded rod with two nuts. The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps. Also can be secured directly to the top of cabinets.	1/2"	1	—
FR12CS58		5/8"	1	—
FR12CS12M		12mm	1	—
FR12CS58M		16mm	1	—
Top Support Adjustable "C" QUIKLOCK™ Bracket for 12x4 System				
FR12ACB12	Used to support the 12x4 system from any new threaded rod extending down directly from the ceiling, grid, or ladder rack system. Two position height adjustments to accommodate system with or without hinged cover. Bracket is secured to threaded rod with two nuts. The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps.	1/2"	1	—
FR12ACB58		5/8"	1	—
FR12ACB12M		12mm	1	—
FR12ACB58M		16mm	1	—
Trapeze QUIKLOCK™ Bracket for 12x4 System				
FR12TB12	Used to support the 12x4 system by spanning two threaded rod drops. Can be installed from above or below. Bracket is secured to each threaded rod with two nuts. The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps.	1/2"	1	—
FR12TB58		5/8"	1	—
FR12TB12M		12mm	1	—
FR12TB58M		16mm	1	—

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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12x4 *FIBERRUNNER*® Mounting Brackets (continued)



FR12ACAB



FEIAB58



F2PCLB12
F2PCLB58
F2PCLB12M
F2PCLB58M



FRAFC58



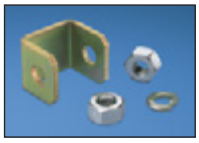
FR12BS-L

Part Number	Part Description	For Threaded Rod Size	Std. Pkg. Qty.	Std. Ctn. Qty.
Adjustable Cabinet *QUIKLOCK*™ Bracket for 12x4 System				
FR12ACAB	Used to support the 12x4 system, dual 6x4 or dual 4x4 systems attaching to the top of cabinets. Adjustable from 4 1/4" (108mm) to 12" (305mm) allowing runs to be leveled over uneven cabinet heights. Also allows spillouts such as vertical tee to be positioned directly over cable inlets on cabinet tops. Bracket is secured to the cabinet frame with through bolts (not included). The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps.	—	1	—
EIA/TIA Threaded Rod Mounting Bracket				
FEIAB58	Bracket consists of two identical components that clamp onto the crossmembers of standard EIA/TIA racks and are secured with standard hex nuts and split lockwashers (included) tightened onto a length of 5/8" diameter threaded rod (not included). The threaded rod is positioned in the center of the brackets providing a vertical threaded rod stud to mount *FIBERRUNNER*® and *FIBER-DUCT*™ Threaded Rod Mounting Brackets onto.	5/8"	1	10
Two-Piece Ladder Rack Bracket for Attaching Threaded Rod to 1 1/2" – 2" Ladder Rack				
F2PCLB12	Two-piece bracket attaches to 3/8" (9.5mm) wide x 1 1/2" (38.1mm) or 3/8" (9.5mm) wide x 2" (50.8mm) ladder rack rail. Bracket halves slide into position and clamp together on the ladder rack rail, which allows for a one-handed assembly of the threaded rod (not included). Contains bracket and hardware for attaching bracket to ladder rack.	1/2"	1	10
F2PCLB58		5/8"	1	10
F2PCLB12M		12mm	1	10
F2PCLB58M		16mm	1	10
Two-Piece Framing Clip for Attaching 5/8" Threaded Rod to 2" x 9/16" C-Channel Auxiliary Framing Bars				
FRAFC58	Two-piece framing clip attaches to auxiliary framing bars. Framing clip halves slide into position and interlock on the auxiliary framing bars, allowing easier assembly of the threaded rod to bars. Contains two-piece framing clip and hardware for attaching framing clip to auxiliary framing bars. (5/8" threaded rod not included.)	5/8"	1	10
Self-Tapping Screws for 12x4 Brackets				
FR12BS-L	Self-tapping screws allow selected 12x4 fittings to be fastened directly to mounting brackets for additional support. Screws tap directly into those 12x4 fittings that have plastic bosses. Those part numbers are FRRA12X4YL, FRH4512X4YL, FRT12X4YL, FRT12X4W6YL, FRFWC12X4YL, FRFWC12X4W6YL, FRVT12X4YL, FRRF126RYL and FRRF126LYL.	—	50	500

Table continued on page C3.14

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12x4 *FIBERRUNNER*® Mounting Brackets (continued)



FLB12X15
FLB58X15
FLB12X20
FLB58X20



FR4PRB58



FRTBKT-X

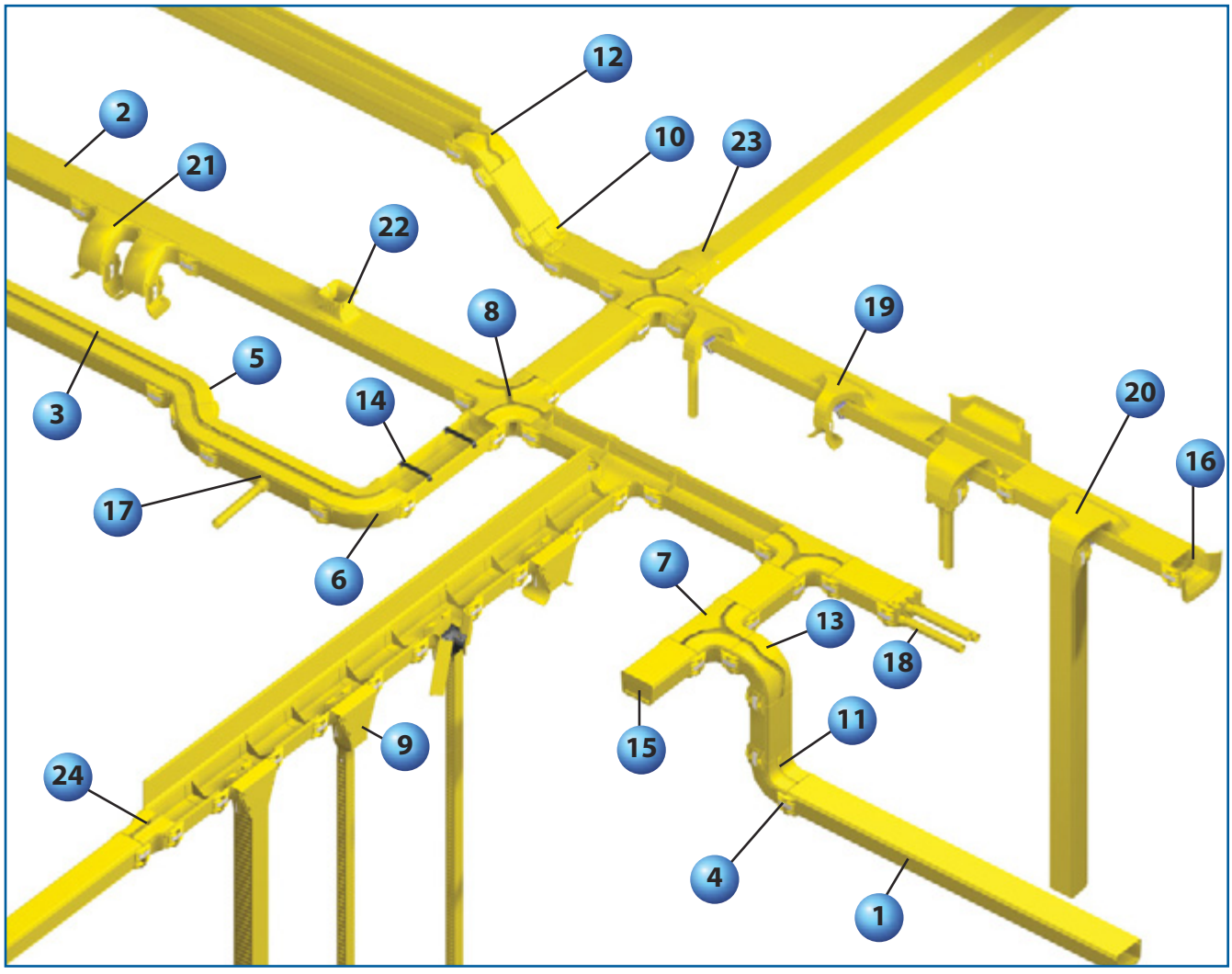
Part Number	Part Description	For Threaded Rod Size	Std. Pkg. Qty.	Std. Ctn. Qty.
Bracket for Attaching Threaded Rod to 1 1/2" Ladder Rack				
FLB12X15	Bracket attaches to 3/8" (9.5mm) wide x 1 1/2" (38.1mm) ladder rack rail. Bracket accepts threaded rod (not included). Contains bracket and hardware for attaching bracket to ladder rack.	1/2"	1	10
FLB58X15		5/8"	1	10
Bracket for Attaching Threaded Rod to 2" Ladder Rack				
FLB12X20	Bracket attaches to 3/8" (9.5mm) wide x 2" (50.8mm) ladder rack rail. Bracket accepts threaded rod (not included). Contains bracket and hardware for attaching bracket to ladder rack.	1/2"	1	10
FLB58X20		5/8"	1	10
4 Post Rack Bracket				
FR4PRB58	Used to support 12x4, 6x4 and 4x4 systems attaching to the top of the 19" wide version of the *PANDUIT* NF4PR84 4 post rack. Contains all hardware required to assemble bracket to the top of the 4 post rack. Bracket accepts 5/8" threaded rod (not included).	5/8"	1	—
1/4" T-Bolt Kit				
FRTBKT-X	T-bolts can be used for additional attachment when securing *FIBERRUNNER*® Channel to mounting brackets. For example, a T-bolt can be inserted thru a 12x4 mounting bracket and positioned within the center rib structure on the underside of 12x4 channel. By tightening the nut, the 12x4 channel is more securely fastened to the mounting bracket.	—	10	100

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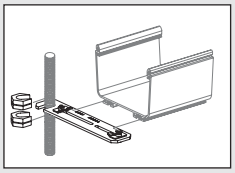
NOTES

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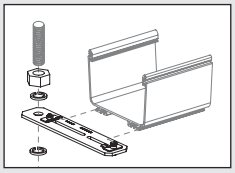
6x4 FIBER RUNNER Routing System Roadmap



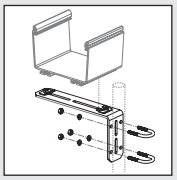
4x4 and 6x4 FIBERRUNNER® Mounting Brackets



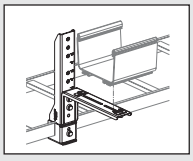
FR6TRBE58 – Existing Threaded Rod QUIKLOCK™ Bracket (page C3.26)



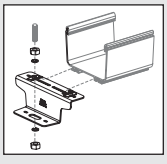
FR6TRBN58 – New Threaded Rod QUIKLOCK™ Bracket (page C3.26)



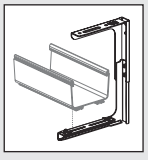
FR6USB – Underfloor Pedestal QUIKLOCK™ Bracket (page C3.26)



FR6ALB – Adjustable Ladder QUIKLOCK™ Bracket (page C3.26)

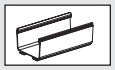


FR6CS58 – Center Support QUIKLOCK™ Bracket (page C3.26)

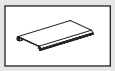


FR6ACB58 – Top Support Adjustable 'C' QUIKLOCK™ Bracket (page C3.26)

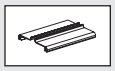
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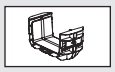
1. **FR6X4**6 – 6x4 FIBERRUNNER® Channel (page C3.18)**



2. **FRHC6**6 – 6x4 Snap-On Hinged Cover (page C3.18)**



3. **FRSHC6**6 – 6x4 Split Hinged Cover (page C3.18)**



4. **FRBC6X4** – 6x4 QUIKLOCK™ Coupler (page C3.19)**



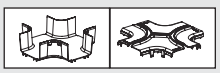
5. **FRH456X4** – 6x4 Horizontal 45° Angle Fitting and FRH45SC6** – Optional Split Cover (page C3.19)**



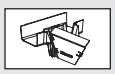
6. **FRRA6X4** – 6x4 Horizontal Right Angle Fitting and FRRASC6** – Optional Split Cover (page C3.19)**



7. **FRT6X4** – 6x4 Horizontal Tee Fitting and FRTSC6** – Optional Split Cover (page C3.19)**



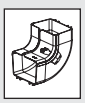
8. **FRFWC6X4** – 6x4 4-Way Cross Fitting and FRFWCSC6** – Optional Split Cover (page C3.20)**



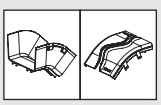
9. **FRVT6X4** – 6x4 QUIKLOCK™ Vertical Tee (page C3.22)**



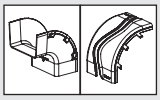
10. **FRIV456X4** – 6x4 Inside Vertical 45° Angle Fitting (page C3.20)**



11. **FRIVRA6X4** – 6x4 Inside Vertical 90° Angle Fitting (page C3.20)**



12. **FROV456X4** – 6x4 Outside Vertical 45° Angle Fitting and FROV45SC6** – Optional Split Cover (page C3.20)**



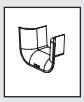
13. **FROVRA6X4** – 6x4 Outside Vertical Right Angle Fitting and FROVRASC6** – Optional Split Cover (page C3.21)**



14. **FRCR6BL-X – Cable Retainer for 6x4 System (page C3.18)**



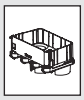
15. **FREC6X4** – 6x4 End Cap Fitting (page C3.20)**



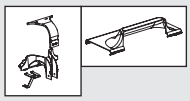
16. **FRTR6X4** – 3-Sided BRC Trumpet Spillout for 6x4 Exit (page C3.25)**



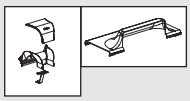
17. **FR1.5IDE** – 1-Port Spillout Side Exit to 1.5" (38mm) Inside Diameter Corrugated Tubing (page C3.24)**



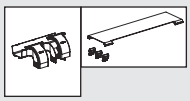
18. **FRIDT6X4** – 3-Port Spillout to 1.5" (38mm) Inside Diameter Corrugated Tubing (page C3.25)**



19. **FRSP** – Spill-Over Junction with 2x2 Exit and FRSP6C** – Optional Cover for 6x4 System (pages C3.22 and C3.23)**



20. **FRSP4** – Spill-Over Junction with 4x4 Exit and FRSP46C** – Optional Cover for 6x4 System (page C3.23)**



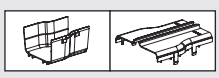
21. **FRDDS6X4** – 6x4 Dual Downspout and FRDDSHC6** – Optional Cover for 6x4 Dual Downspout (page C3.24)**



22. **FRUPS6X4** – 6x4 Up Spout (page C3.25)**



23. **FRRF64** – 6x4 FIBERRUNNER® Fitting to 4x4 FIBER-DUCT™ Channel Reducer Fitting (page C3.21)**



24. **FRRF6FR4** – 6x4 to 4x4 FIBERRUNNER® Reducer Fitting and FRRF6FR4SC** – Optional Split Cover (page C3.21)**

**Available Colors include: YL (Yellow), OR (Orange), and BL (Black).
Note: Additional 6x4 and 4x4 bracket applications, see page C3.32.

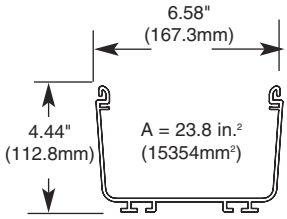
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c UL us LISTED 6x4 FIBERRUNNER® Routing System

Cable Fills for 6x4 FIBERRUNNER® Cable Routing System

The maximum amounts may vary according to the cable fill installation methods, straightness of cables, etc.





6x4 FIBERRUNNER® Cable Routing System							
Fill/Pile Up	Internal Area In.²	Diameter 1.6mm .063"	Diameter 2.0mm .079"	Diameter 30mm .118"	Augmented Category 6 23 AWG/UTP CM Diameter 9mm .354"	Fiber Optic Ribbon Interconnect Cable Diameter 5.20mm .205"	Category 6 Diameter 6.35mm .25"
40% Fill							
2" Pile Up	11.95	1534	982	436	49	145	97
3" Pile Up	18.16	2331	1492	663	74	220	148
4" Pile Up	23.8	3055	1955	869	97	288	194
50% Fill							
2" Pile Up	11.95	1917	1227	545	61	181	122
3" Pile Up	18.16	2914	1865	829	92	275	185
4" Pile Up	23.8	3819	2444	1086	121	361	242
60% Fill							
2" Pile Up	11.95	2301	1472	654	73	217	146
3" Pile Up	18.16	3496	2238	994	111	330	222
4" Pile Up	23.8	4582	2933	1303	145	433	291

Channel cutting instructions: For optimum results, use FRCUT miter box and saw. For larger quantities use a plastic cutting saw blade for clean, burr-free cuts. Recommend: Carbide 80T and 100T; .090" thickness, .125" kerf.

6x4 FIBERRUNNER® Routing System – Channel and Covers

- Robust, large capacity 6x4 system ideal for use with large cable counts
- Multiple spillout options provide versatility to mate to various equipment and rack configurations
- QUIKLOCK™ Couplers and Brackets reduce system installation time dramatically
- Channel, covers, fittings and other non-metallic system components made from V-0 flame class rated material
- Compatible with all sizes of PANDUIT® FIBERRUNNER® and PANDUIT® FIBER-DUCT™ Routing Systems, cable management, and racks
- Compliant with the applicable tests in Telcordia GR-63-CORE Network Equipment Building Systems (NEBS) Level 3



FR6X4



FRHC6



FRSHC6



FRCR6BL-X

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
6x4 FIBERRUNNER® Channel			
FR6X4YL6	Used to carry the cables horizontally throughout the system. Accepts hinged cable retainers FRCR6BL-X, hinged cover FRHC6YL6 or split hinged cover FRSHC6YL6. Use QUIKLOCK™ Coupler FRBC6X4YL to attach channel and/or fittings.	6	36
6x4 Snap-On Hinged Cover			
FRHC6YL6	Optional snap-on hinged cover for channel FR6X4YL6. Hinge feature enables positioning of cover at angles between 30° and 90°.	6	36
6x4 Split Hinged Cover			
FRSHC6YL6	Optional split hinged cover for the channel FR6X4YL6. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables. Snap-on hinge feature enables positioning of cover at angles between 30° and 90°.	6	36
Cable Retainer for 6x4 System			
FRCR6BL-X	Cable retainer holds cable in the channel when cover is not used. Install anywhere on channel, near the coupler or every 18" (457mm). Black color only.	10	100

For other colors replace YL (Yellow) with OR (Orange) or BL (Black).
Order number of feet required, in multiples of standard 6' length increments.
Order number of cable retainers required, in multiples of Standard Package Quantity.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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6x4 *FIBERRUNNER®* *QUIKLOCK™* Coupler

- Pre-assembled to provide fast mechanical assembly of components
- No tools required for installation; bolts loosen for component disassembly



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
FRBC6X4YL	Pre-assembled coupler quickly joins two sections of channel and/or fittings. Mechanically attaches without tightening bolts. Bolts release using 3/8" nut driver to allow coupler to be removed if necessary.	1	5

For a bulk package of twenty couplers, order FRBC6X4YL-E.
For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

6x4 *FIBERRUNNER®* System Fittings

- Minimum 2" (50.8mm) bend radius control fittings
- Protects against signal loss and performance degradation
- Assemble using FRBC *QUIKLOCK™* Couplers
- Optional split covers snap onto each fitting
- Covers feature 3/4" (19mm) gap to allow cable to be laid in



FRRA6X4



FRRASC6



FRH456X4



FRH45SC6



FRT6X4



FRTSC6

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
6x4 Horizontal Right Angle Fitting				
FRRA6X4YL	Attaches to 6x4 channel and/or fittings to create a 90° horizontal turn from a straight horizontal run. Accepts optional split cover FRRASC6YL.	(2 pcs.) FRBC6X4YL	1	5
Split Cover for 6x4 Horizontal Right Angle Fitting				
FRRASC6YL	Optional split cover for the horizontal right angle fitting FRRA6X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5
6x4 Horizontal 45° Angle Fitting				
FRH456X4YL	Attaches to 6x4 channel and/or fittings to create a 45° horizontal turn from a straight horizontal run. Accepts optional split cover FRH45SC6YL.	(2 pcs.) FRBC6X4YL	1	5
Split Cover for 6x4 Horizontal 45° Angle Fitting				
FRH45SC6YL	Optional split cover for the horizontal 45° angle fitting FRH456X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5
6x4 Horizontal Tee Fitting				
FRT6X4YL	Attaches to 6x4 channel and/or fittings to create a 90° horizontal branch from a straight horizontal run. Accepts optional split cover FRTSC6YL.	(3 pcs.) FRBC6X4YL	1	5
Split Cover for 6x4 Horizontal Tee Fitting				
FRTSC6YL	Optional split cover for the horizontal tee fitting FRT6X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

Table continues on page C3.20

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6x4 FIBERRUNNER® System Fittings (continued)


FRFWC6X4


FRFWCSC6


FREC6X4


FRIVRA6X4


FRIV456X4


FROV456X4


FROV45SC6

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
6x4 4-Way Cross Fitting				
FRFWC6X4YL	Attaches to 6x4 channel and/or fittings to create a horizontal 4-way cross intersection. Accepts optional split cover FRFWCSC6YL.	(4 pcs.) FRBC6X4YL	1	5
Split Cover for 6x4 4-Way Cross Fitting				
FRFWCSC6YL	Optional split cover for the 4-way cross fitting FRFWC6X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5
6x4 End Cap Fitting				
FREC6X4YL	Used for closing off open ends of the channel or fittings. No coupler required. Push-on installation.	—	1	5
6x4 Inside Vertical 90° Angle Fitting				
FRIVRA6X4YL	Attaches to 6x4 channel and/or fittings to create a 90° upward angle from a straight horizontal run. Used with outside vertical 90° angle fitting FROVRA6X4YL to change level of a straight horizontal run. Includes split cover.	(2 pcs.) FRBC6X4YL	1	5
6x4 Inside Vertical 45° Angle Fitting				
FRIV456X4YL	Attaches to 6x4 channel and/or fittings to create a 45° upward angle from a straight horizontal run. Used with outside vertical 45° angle fitting FROV456X4YL to change level of a straight horizontal run. Includes split cover.	(2 pcs.) FRBC6X4YL	1	5
6x4 Outside Vertical 45° Angle Fitting				
FROV456X4YL	Attaches to 6x4 channel and/or fittings to create a 45° downward angle from a straight horizontal run. Used with inside vertical 45°angle fitting FRIV456X4YL to change level of a straight horizontal run. Accepts optional split cover FROV45SC6YL.	(2 pcs.) FRBC6X4YL	1	5
Split Cover for 6x4 Outside Vertical 45° Angle Fitting				
FROV45SC6YL	Optional split cover for the outside vertical 45° angle fitting FROV456X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

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6x4 FIBERRUNNER® System Fittings (continued)


FROVRA6X4


FROVRASC6


FRRF6FR4


FRRF6FR4SC


FRRF64

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
6x4 Outside Vertical Right Angle Fitting				
FROVRA6X4YL	Attaches to 6x4 channel and/or fittings to create a 90° vertical turn down from a straight horizontal run. Accepts optional split cover FROVRASC6YL.	(2 pcs.) FRBC6X4YL	1	5
Split Cover for 6x4 Outside Vertical Right Angle Fitting				
FROVRASC6YL	Optional split cover for the outside vertical right angle fitting FROVRA6X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5
6x4 to 4x4 FIBERRUNNER® Reducer Fitting				
FRRF6FR4YL	Attaches any 6x4 FIBERRUNNER® Fitting or Channel to any 4x4 FIBERRUNNER® Fitting or Channel. Accepts split cover FRRF6FR4SCYL.	(1 pc.) FRBC6X4YL (1 pc.) FRBC4X4YL	1	5
Split Cover for 6x4 to 4x4 FIBERRUNNER® Reducer Fitting				
FRRF6FR4SCYL	Optional split cover for the 6x4 FIBERRUNNER® to 4x4 FIBERRUNNER® Reducer Fitting FRRF6FR4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5
6x4 FIBERRUNNER® System to 4x4 FIBER-DUCT™ Reducer Fitting				
FRRF64YL	Attaches any 6x4 FIBERRUNNER® Fitting or Channel to the 4x4 FIBER-DUCT™ Channel S4X4YL6 or E4X4YL6. Includes solid cover.	(1 pc.) FRBC6X4YL	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

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6x4 FIBERRUNNER® System Spillouts

- Spill-overs allow safe transition from horizontal to vertical runs
- 2" (50.8mm) bend radius control
- Transition to channel, slotted channel, and corrugated loom tubing
- Spill-over junction fittings can be retro-fitted to existing horizontal runs



FRVT6X4



FTR4X4



FIDT4X4BL



FRHD4KT



TRC4HDBL



FRLPR42BL



FRSP

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
6x4 QUIKLOCK™ Vertical Tee				
FRVT6X4YL	Attaches to 6x4 channel and/or fittings to create 90° vertical drop from a straight horizontal run. Hinged door included. Accepts FTR4X4YL, FIDT4X4BL, S4X4YL6 or E4X4YL6 directly. Accepts optional snap-on cover FRHC6YL6 in conjunction with channel.	(2 pcs.) FRBC6X4YL	1	5
3-Sided Vertical Tee Trumpet Spillout				
FTR4X4YL	Used to limit the bend radius of the cable to 2" (50.8mm) when exiting from a 4x4 or 6x4 FIBERRUNNER® Vertical Tee and 4x4 FIBER-DUCT™ Fittings.	—	1	5
2-Port Spillout to 1.5" (38mm) Inside Diameter Corrugated Tubing				
FIDT4X4BL	Used to route cable into one or two pieces of 1.5" (38mm) diameter split corrugated tubing. Used with FRVT6X4YL, FRVT4X4YL, or FVT4X4YL. Securely holds corrugated split tubing to ensure system integrity and easy access to add or remove cables. Black color only.	—	1	5
4x4 Hinged Duct Vertical Cable Manager Kit				
FRHD4KTYL	Provides secure, accessible route for cables spilling out from vertical tee to rack mounted equipment. Kit includes 6' length of 4x4 capacity hinged duct, 6' length of 4x4 hinged duct cover, one end cap for 4x4 hinged duct, three FZBA1.5X4 adjustable "Z" brackets, an adapter fitting, six WR4-C wire retainers and all required mounting hardware. Attaches directly to 6x4 and 4x4 vertical tee exit or FRLPR64 low profile reducer.	—	1	—
4x4 Hinged Duct Bend Radius Control Trumpet				
TRC4HDBL	Bend radius control trumpet for exiting at the sidewall of 4" wall heights of type H hinged cover wiring duct channels. Maintains 1" (25.4mm) bend radius control. Black color only.	—	1	10
Low Profile Reducer 4x4 to 2x2 for Vertical Tee				
FRLPR42BL	Assembled into the 6x4 vertical tee FRVT6X4YL or 4x4 vertical tee FRVT4X4YL with an audible snap, the FRLPR42BL allows for the transition to 2x2 FIBERRUNNER® or 2x2 FIBER-DUCT™ Channel with minimal space required. No tools required for assembly. Black color only.	—	1	5
Spill-Over Junction with 2x2 Exit				
FRSPYL	Assembles onto 4x4, 6x4, or 12x4 FIBERRUNNER® Channel, spilling over the side into a 2x2 vertical channel, fitting, or corrugated tube. Mounts directly to existing installation with no alteration required. Mounting hardware provided for secure attachment.	—	1	—

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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6x4 *FIBERRUNNER*® System Spillouts (continued)



FRSP6C



FTR2X2



FIDT2X2



FRHD2KT



TRC2HDBL



FRSP4



FRSP46C

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
Cover for Spill-Over Junction with 2x2 Exit for 6x4 Channel				
FRSP6CYL	Used to fully enclose 6x4 channel in conjunction with the spill-over junction FRSPYL. Cover snaps onto the channel base. Hinged feature allows easy access to add or remove cables.	—	1	5
3-Sided BRC Trumpet Spillout for 2x2 Exit				
FTR2X2YL	Used to limit the bend radius of the cable to 2" (50.8mm) when exiting from a *FIBERRUNNER*® Spill-Over FRSPYL or from 2x2 *FIBER-DUCT*™ Channel.	(1 pc.) FBC2X2YL	1	5
1-Port Spillout to 1.5" (38mm) Inside Diameter Corrugated Tubing				
FIDT2X2YL	Used to route cable into one piece of 1.5" (38mm) diameter split corrugated tubing. Used with *FIBERRUNNER*® Spill-Over FRSPYL, 2x2 *FIBER-DUCT*™ Fittings, and the 2x2 *FIBERRUNNER*® Hinged Channel. Securely holds split corrugated tubing to ensure system integrity and easy access to add or remove cables.	(1 pc.) FBC2X2YL	1	5
2x2 Hinged Duct Vertical Cable Manager Kit				
FRHD2KTYL	Provides secure, accessible route for cables spilling out from a vertical tee or spill-over junction to rack mounted equipment. Kit includes 6' length of 2x2 *FIBERRUNNER*® Hinged Channel H2X2YL6, 6' length of 2x2 snap-on hinged cover HC2YL6, four adjustable "Z" brackets FZBA1.5X4, one *FIBERRUNNER*® 2x2 End Cap FHDEC2X2YL, six hinged duct 2" wire retainers WR2H-C and all required mounting hardware. Attaches to 2x2 vertical tee exit or spill-over junction with a 2x2 exit with a 2x2 *QUIKLOCK*™ Coupler FBC2X2YL. Also attaches directly to 4x4 or 6x4 vertical tee exits with low profile reducer FRLPR42BL. Yellow and orange colors only.	—	1	—
2x2 *FIBERRUNNER*® Bend Radius Control Trumpet				
TRC2HDBL	Bend radius control trumpet for exiting at the sidewall of 2" wall heights of type H hinged cover wiring duct channels. Maintains 1" (25.4mm) bend radius control. Black color only.	—	1	10
Spill-Over Junction with 4x4 Exit				
FRSP4YL	Assembles onto 4x4, 6x4, or 12x4 *FIBERRUNNER*® Channel, spilling over the side into a 4x4 vertical exit. Requires coupler to attach 4x4 *FIBERRUNNER*® Channel and Fittings to the vertical exit. Mounts directly to existing installation with no alteration required. Mounting hardware provided for secure attachment.	(1 pc.) FRBC4X4YL	1	—
Cover for Spill-Over Junction with 4x4 Exit for 6x4 Channel				
FRSP46CYL	Used to fully enclose the 6x4 channel in conjunction with the spill-over junction FRSP4YL. Cover snaps onto the channel base. Hinged feature allows easy access to add or remove cables.	—	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

Table continues on page C3.24

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6x4 FIBERRUNNER® System Spillouts (continued)



FRDDS6X4



FRDDSHC6



FRTR4X4



FRIDT4X4



FR1.5IDE

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
6x4 Dual Downspout				
FRDDS6X4YL	Attaches to 6x4 channel and/or fittings to create two 90° 4x4 downward transitions from a horizontal run. Downspouts are positioned 600mm apart to provide drops into cable entrances on multiple cabinet line-ups. The fitting maintains a 2" bend radius control throughout the transition to the vertical downspouts. Includes two snap-on throat covers for the dual downspouts. Accepts optional cover FRDDSHC6YL.	(2) FRBC6X4YL (2) FRBC4X4YL	1	—
Cover for 6x4 Dual Downspout				
FRDDSHC6YL	Used to fully enclose the 6x4 dual downspout fitting FRDDS6X4YL. Cover is attached to the fitting base with three hinge clips. The hinge clips allow the hinged cover to rotate to a fully closed position and an open position greater than 90°.	—	1	5
3-Sided BRC Trumpet Spillout for 4x4 FIBERRUNNER® Exit				
FRTR4X4YL	Used to limit the bend radius of the cable to 2" (50.8mm) when exiting from 4x4 FIBERRUNNER® Channel or a 4x4 FIBERRUNNER® Horizontal Tee.	(1 pc.) FRBC4X4YL	1	5
2-Port Spillout to 1.5" (38mm) Inside Diameter Corrugated Tubing				
FRIDT4X4YL	Used to route cable into one or two pieces of 1.5" (38mm) diameter split corrugated tubing. Requires coupler to be used with 4x4 FIBERRUNNER® Fitting. Used with any 4x4 FIBERRUNNER® Fitting. Securely holds corrugated split tubing to ensure system integrity and easy access to add or remove cables.	(1 pc.) FRBC4X4YL	1	5
1-Port Spillout Side Exit to 1.5" (38mm) Inside Diameter Corrugated Tubing				
FR1.5IDEYL	Used to route cable into 1.5" (38mm) diameter split corrugated tubing directly through a hole cut in the side wall of the 4x4, 6x4, and 12x4 FIBERRUNNER® Channel or 4x4 FIBER-DUCT™ Channel. Provides 1" (25.4mm) bend radius control at the exit. Securely holds split corrugated tubing to ensure system integrity and easy access to add or remove cables. Includes drilling template.	—	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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6x4 FIBERRUNNER® System Spillouts (continued)



FRTR6X4



FRUPS6X4



FITF6X4



FRIDT6X4

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
3-Sided BRC Trumpet Spillout for 6x4 Exit				
FRTR6X4YL	Used to limit the bend radius of the cable to 2" (50.8mm) when exiting from 6x4 channel, 6x4 horizontal tee fitting, or 6x4 exit on 12x4 vertical tee.	(1 pc.) FRBC6X4YL	1	5
6x4 Up Spout				
FRUPS6X4YL	Allows cable to be directed upward out of the channel deployed directly below racks and cabinets in underfloor installations. Provides 2" (50.8mm) bend radius. Snaps directly onto the channel and can be positioned to allow cables to be laid in. A 1" (25.4mm) top bezel is included. Other fittings can be installed for specific applications including FTR4X4YL and FIDT4X4BL.	—	1	5
Innerduct Transition Fitting				
FITF6X4	Metal fitting attaches to end of channel or fitting to transition up to four pieces of solid 1.5" (38mm) inside diameter inner duct. Hardware is included for installation. Black color only.	—	1	10
3-Port Spillout to 1.5" (38mm) Inside Diameter Corrugated Tubing				
FRIDT6X4YL	Used to route cable into three separate pieces of 1.5" (38mm) diameter split corrugated tubing. Used with FRVT12X4YL or any 6x4 fitting. Securely holds corrugated split tubing to ensure system integrity and easy access to add or remove cables.	(1 pc.) FRBC6X4YL	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

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4x4 and 6x4 *FIBERRUNNER*® Mounting Brackets



FR6TRBE12
FR6TRBE58
FR6TRBE12M
FR6TRBE58M



FR6TRBN12
FR6TRBN58
FR6TRBN12M
FR6TRBN58M



FR6USB



FR6ALB



FR6CS12
FR6CS58
FR6CS12M
FR6CS58M



FR6ACB12
FR6ACB58
FR6ACB12M
FR6ACB58M



FR6TB38
FR6TB12
FR6TB38M
FR6TB12M

Part Number	Part Description	For Threaded Rod Size	Std. Pkg. Qty.	Std. Ctn. Qty.
Existing Threaded Rod *QUIKLOCK*™ Bracket for 6x4 and 4x4 Systems				
FR6TRBE12	Used to support the 6x4 and 4x4 systems from existing threaded rod installations. Bracket is secured to threaded rod with two split nuts. The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps.	1/2"	1	10
FR6TRBE58		5/8"	1	10
FR6TRBE12M		12mm	1	10
FR6TRBE58M		16mm	1	10
New Threaded Rod *QUIKLOCK*™ Bracket for 6x4 and 4x4 Systems				
FR6TRBN12	Used to support the 6x4 and 4x4 systems from any new threaded rod installations. Bracket is secured to threaded rod with two nuts. The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps.	1/2"	1	10
FR6TRBN58		5/8"	1	10
FR6TRBN12M		12mm	1	10
FR6TRBN58M		16mm	1	10
Underfloor Pedestal *QUIKLOCK*™ Bracket for 6x4 and 4x4 Systems				
FR6USB	Used to support the 6x4 and 4x4 systems by attaching to underfloor pedestals. (Contains all necessary hardware.) Use on pedestals up to 1" in diameter. The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps.	—	1	10
Adjustable Ladder *QUIKLOCK*™ Bracket for 6x4 and 4x4 Systems				
FR6ALB	Used to support the 6x4 and 4x4 systems attaching to any 3/8" (9.5mm) x 1 1/2" (38.1mm) or 3/8" (9.5mm) x 2" (50.8mm) ladder rack rail. Adjustable to nine incremental positions from 4" (101mm) to 12" (305mm) above or below the ladder rack. No threaded rod required. The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps.	—	1	10
Center Support *QUIKLOCK*™ Bracket for 6x4 and 4x4 Systems				
FR6CS12	Used to support the 6x4 and 4x4 systems from below with new threaded rod. Bracket is secured to threaded rod with two nuts. The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps. Also can be secured directly to the top of cabinets.	1/2"	1	10
FR6CS58		5/8"	1	10
FR6CS12M		12mm	1	10
FR6CS58M		16mm	1	10
Top Support Adjustable "C" *QUIKLOCK*™ Bracket for 6x4 and 4x4 Systems				
FR6ACB12	Used to support the 6x4 and 4x4 systems from any new threaded rod extending down directly from the ceiling, grid, or ladder rack system. Two position height adjustments to accommodate system with or without hinged cover. Bracket is secured to threaded rod with two nuts. The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps.	1/2"	1	—
FR6ACB58		5/8"	1	—
FR6ACB12M		12mm	1	—
FR6ACB58M		16mm	1	—
Trapeze *QUIKLOCK*™ Bracket for 6x4 and 4x4 Systems				
FR6TB38	Used to support the 6x4 and 4x4 systems by spanning two threaded rod drops. Can be installed from above or below. Bracket is secured to each threaded rod with two nuts. The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps.	3/8"	1	10
FR6TB12		1/2"	1	10
FR6TB38M		10mm	1	10
FR6TB12M		12mm	1	10

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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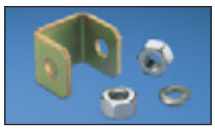
4x4 and 6x4 *FIBERRUNNER*® Mounting Brackets (continued)


FR6ACAB


FEIAB58


F2PCLB12
F2PCLB58
F2PCLB12M
F2PCLB58M


FRAFC58


FLB12X15
FLB58X15
FLB12X20
FLB58X20


FR6LRB

Part Number	Part Description	For Threaded Rod Size	Std. Pkg. Qty.	Std. Ctn. Qty.
Adjustable Cabinet *QUIKLOCK*™ Bracket for 6x4 and 4x4 Systems				
FR6ACAB	Used to support the 6x4 and 4x4 systems attaching to the top of cabinets. Adjustable from 4 1/4" (108mm) to 9" (229mm) allowing runs to be leveled over uneven cabinet heights. Also allows spillouts such as the vertical tee to be positioned directly over cable inlets on cabinet tops. Bracket is secured to the cabinet frame with through bolts (not included). The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps.	—	1	—
EIA/TIA Threaded Rod Mounting Bracket				
FEIAB58	Bracket consists of two identical components that clamp onto the crossmembers of standard EIA/TIA racks and are secured with standard hex nuts and split lockwashers (included) tightened onto a length of 5/8" diameter threaded rod (not included). The threaded rod is positioned in the center of the brackets providing a vertical threaded rod stud to mount *FIBERRUNNER*® and *FIBER-DUCT*™ Threaded Rod Mounting Brackets onto.	5/8"	1	10
Two-Piece Ladder Rack Bracket for Attaching Threaded Rod to 1 1/2" – 2" Ladder Rack				
F2PCLB12	Two-piece bracket attaches to 3/8" (9.5mm) wide x 1 1/2" (38.1mm) or 3/8" (9.5mm) wide x 2" (50.8mm) ladder rack rail. Bracket halves slide into position and clamp together on the ladder rack rail, which allows for a one-handed assembly of the threaded rod (not included). Contains bracket and hardware for attaching bracket to ladder rack.	1/2"	1	10
F2PCLB58		5/8"	1	10
F2PCLB12M		12mm	1	10
F2PCLB58M		16mm	1	10
Two-Piece Framing Clip for Attaching 5/8" Threaded Rod to 2" x 9/16" C-Channel Auxiliary Framing Bars				
FRAFC58	Two-piece framing clip attaches to auxiliary framing bars. Framing clip halves slide into position and interlock on the auxiliary framing bars, allowing easier assembly of the threaded rod to bars. Contains two-piece framing clip and hardware for attaching framing clip to auxiliary framing bars. (5/8" threaded rod not included.)	5/8"	1	10
Bracket for Attaching Threaded Rod to 1 1/2" Ladder Rack				
FLB12X15	Bracket attaches to 3/8" (9.5mm) wide x 1 1/2" (38.1mm) ladder rack rail. Bracket accepts threaded rod (not included). Contains bracket and hardware for attaching bracket to ladder rack.	1/2"	1	10
FLB58X15		5/8"	1	10
Bracket for Attaching Threaded Rod to 2" Ladder Rack				
FLB12X20	Bracket attaches to 3/8" (9.5mm) wide x 2" (50.8mm) ladder rack rail. Bracket accepts threaded rod (not included). Contains bracket and hardware for attaching bracket to ladder rack.	1/2"	1	10
FLB58X20		5/8"	1	10
Ladder Rack *QUIKLOCK*™ Bracket for 6x4 and 4x4 Systems				
FR6LRB	Used to support the 6x4 and 4x4 systems attaching directly to any 3/8" (9.5mm) x 1 1/2" (38.1mm) or 3/8" (9.5mm) x 2" (50.8mm) ladder rack rail. No threaded rod required. The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps.	—	1	10

Table continues on page C3.28

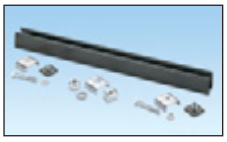
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4x4 and 6x4 FIBERRUNNER® Mounting Brackets (continued)


FR6LB


FR6RMBEIA


FRRMBNF58


FR4PRB58

Part Number	Part Description	For Threaded Rod Size	Std. Pkg. Qty.	Std. Ctn. Qty.
"L" Wall Mount QUIKLOCK™ Bracket for 6x4 and 4x4 Systems				
FR6LB	Used to support the 6x4 and 4x4 systems attaching to a wall or the front or back of an equipment rack. The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps.	—	1	10
EIA/TIA Rack Mount QUIKLOCK™ Bracket for 6x4 and 4x4 Systems				
FR6RMBEIA	Used to support the 6x4 and 4x4 systems attaching to the top of an equipment rack. Contains hardware to mount to the top of EIA/TIA equipment racks. No threaded rod required. The pre-assembled slide clamps enable fast assembly to channel. Use 7/16" nut driver on slide clamps.	—	1	10
NETFRAME®/NETRACK™ QUIKLOCK™ Mounting Bracket for 6x4 and 4x4 Systems				
FRRMBNF58	Used to support the 6x4 and 4x4 systems attaching to the top of NETFRAME® or NETRACK™ Rack. (Contains all necessary mounting hardware.) Bracket accepts 5/8" threaded rod.	5/8"	1	—
4 Post Rack Bracket				
FR4PRB58	Used to support 12x4, 6x4, and 4x4 systems attaching to the top of the 19" wide version of the *PANDUIT* NF4PR84 4 post rack. Contains all hardware required to assemble bracket to the top of the 4 post rack. Bracket accepts 5/8" threaded rod (not included).	5/8"	1	—

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Adapters to Other Systems



FRADC12X4BL



FRADC6X4



FRADC4X4BL



FADC4X4



FRTEL6



FRTEL4



FRWBS68

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
Adapter from 12x4 *FiberRunner*® System to ADC 12x4 FiberGuide*				
FRADC12X4BL	Fitting that transitions from ADC's 12x4 FiberGuide* System to 12x4 *FiberRunner*® System. Fitting has a black finish and is made from metal. Attachment hardware is included.	(1 pc.) FRBC12X4YL	1	5
Adapter from 6x4 *FiberRunner*® System to ADC 6x4 FiberGuide*				
FRADC6X4YL	Fitting that transitions from ADC's 6x4 FiberGuide* System to 6x4 *FiberRunner*® System. Bolts release using 3/8" nut driver to allow coupler to be removed, if necessary.	—	1	5
Adapter from 4x4 *FiberRunner*® System to ADC 4x4 FiberGuide*				
FRADC4X4BL	Fitting that transitions from ADC's 4x4 FiberGuide* System to 4x4 *FiberRunner*® System. Fitting has a black finish and is made from metal. Attachment hardware is included.	(1 pc.) FRBC4X4YL	1	5
Adapter from 4x4 *Fiber-Duct*™ System to ADC 4x4 FiberGuide*				
FADC4X4	Fitting that transitions from ADC's 4x4 FiberGuide* Fiber Cable Management System to 4x4 *Fiber-Duct*™ System. Fitting has a black finish and is made from metal. Attachment hardware is included.	—	1	10
Adapter from 6x4 *FiberRunner*® System to Telect 6x4 WaveTrax***				
FRTEL6	Fitting that transitions from Telect's 6x4 WaveTrax***** System to 6x4 *FiberRunner*® System. Fitting has a black finish and is made from metal. Attachment hardware is included.	(1 pc.) FRBC6X4YL	1	5
Adapter from 4x4 *FiberRunner*® System to Telect 4x4 WaveTrax***				
FRTEL4	Fitting that transitions from Telect's 4x4 WaveTrax***** System to 4x4 *FiberRunner*® System. Fitting has a black finish and is made from metal. Attachment hardware is included.	(1 pc.) FRBC4X4YL	1	5
Adapter from 6x4 *FiberRunner*® System to Warren & Brown 8x4 Lightpaths***				
FRWBS68	Fitting that transitions from Warren & Brown 8x4 Lightpaths*** System to 6x4 *FiberRunner*® System. Fitting has a black finish and is made from metal. Attachment hardware is included.	(1 pc.) FRBC6X4YL	1	5

*FiberGuide is a registered trademark of ADC Telecommunications, Inc.
**Lightguide is a trademark of the Hellerman Tyton Corporation.
***Lightpaths is a registered trademark of Warren & Brown Technologies Pty Ltd.
****Newton is a tradename of Newton Instrument Company, Inc.
*****WaveTrax is a registered trademark of Telect, Inc.
******Lightrax is a trademark of Tyco Electronics Corporation.

Table continues on page C3.30

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Adapters to Other Systems (continued)



FRNWT12



FRNWT128



FRTYT68



FTDNS4X4

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
Adapter from 12x4 *FiberRunner*® System to Various 12x4 System Channels				
FRNWT12	Fitting that transitions from Tyton 12x4 Lightguide** Channel, Newton**** 12x4 Channel or Ditel 12x4 Lightrax****** Channel to 12x4 *FiberRunner*® System. Fitting has a black finish and is made from metal. Attachment hardware is included.	(1 pc.) FRBC12X4YL	1	—
Adapter from 12x4 *FiberRunner*® System to Various 8x4 System Channels				
FRNWT128	Fitting that transitions from Tyton 8x4 Lightguide** Channel, Newton**** 8x4 Channel or Ditel 8x4 Lightrax****** Channel to 12x4 *FiberRunner*® System. Fitting has a black finish and is made from metal. Attachment hardware is included.	(1 pc.) FRBC12X4YL	1	—
Adapter from 6x4 *FiberRunner*® System to Various 8x4 System Channels				
FRTYT68	Fitting that transitions from Tyton 8x4 Lightguide** Channel, Newton**** 8x4 Channel or Ditel 8x4 Lightrax****** Channel to 6x4 *FiberRunner*® System. Fitting has a black finish and is made from metal. Attachment hardware is included.	(1 pc.) FRBC6X4YL	1	5
Adapter from 4x4 *Fiber-Duct*™ System to Various 4x4 Systems				
FTDNS4X4YL	Fitting that transitions from various 4x4 systems to 4x4 *Fiber-Duct*™ System. Attachment hardware is included.	—	1	5

*FiberGuide is a registered trademark of ADC Telecommunications, Inc.
**Lightguide is a trademark of the Hellerman Tyton Corporation.
***Lightpaths is a registered trademark of Warren & Brown Technologies Pty Ltd.
****Newton is a tradename of Newton Instrument Company, Inc.
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******Lightrax is a trademark of Tyco Electronics Corporation.

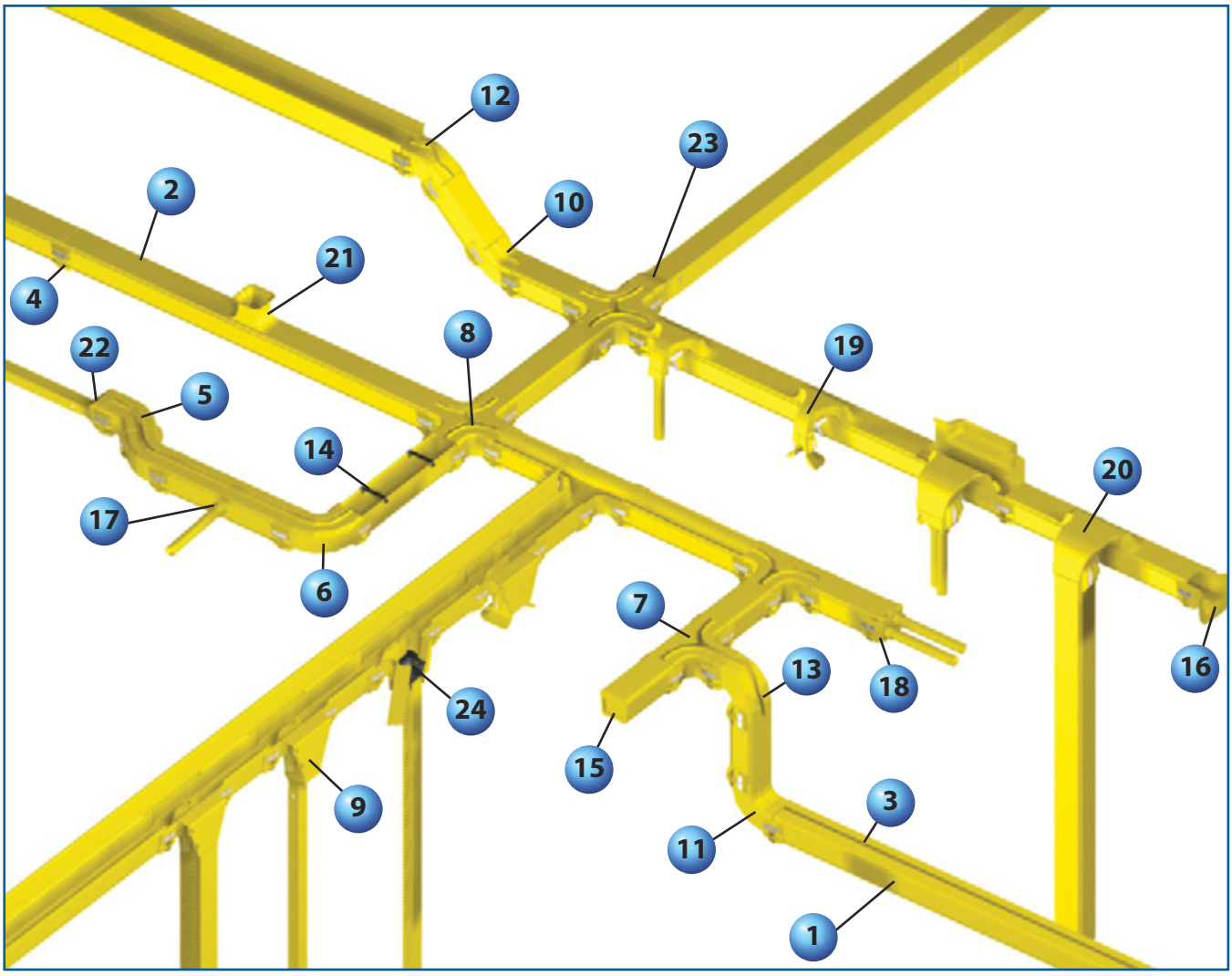
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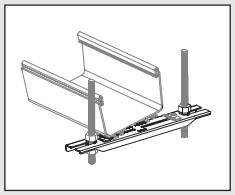
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A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

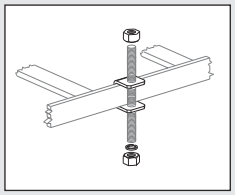
4x4 FIBER RUNNER Routing System Roadmap



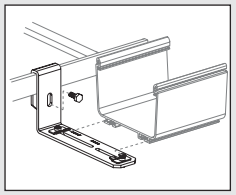
4x4 and 6x4 FIBERRUNNER® Mounting Brackets



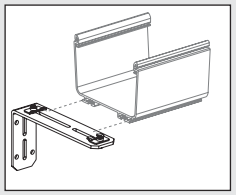
FR6TB38 – Trapeze QUIKLOCK™ Bracket (page C3.26)



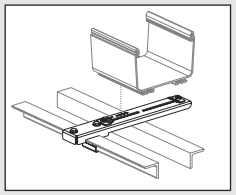
FLB12X20 – Bracket for Attaching Threaded Rod to Ladder Rack (page C3.27)



FR6LRB – Ladder Rack QUIKLOCK™ Bracket (page C3.27)



FR6LB – "L" Wall Mount QUIKLOCK™ Bracket (page C3.28)

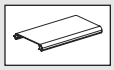


FR6RMBEIA – EIA/TIA Rack Mount QUIKLOCK™ Bracket (page C3.28)

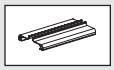
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1 **FR4X4**6 – 4x4 *FIBERRUNNER*® Channel (page C3.34)**



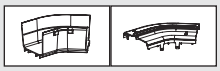
2 **FRHC4**6 – 4x4 Snap-On Hinged Cover (page C3.34)**



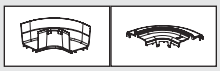
3 **FRSHC4**6 – 4x4 Split Hinged Cover (page C3.34)**



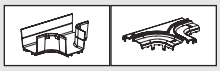
4 **FRBC4X4** – 4x4 *QUIKLOCK*™ Coupler (page C3.35)**



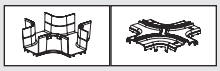
5 **FRH454X4** – 4x4 Horizontal 45° Angle Fitting and FRH45SC4** Optional Split Cover (page C3.35)**



6 **FRRA4X4** – 4x4 Horizontal Right Angle Fitting and FRRASC4** – Optional Split Cover (page C3.35)**



7 **FRT4X4** – 4x4 Horizontal Tee Fitting and FRTSC4** – Optional Split Cover (page C3.36)**



8 **FRFWC4X4** – 4x4 4-Way Cross Fitting and FRFWCSC4** – Optional Split Cover (page C3.36)**



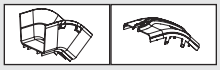
9 **FRVT4X4** – 4x4 *QUIKLOCK*™ Vertical Tee (page C3.38)**



10 **FRIV454X4** – 4x4 Inside Vertical 45° Angle Fitting (page C3.36)**



11 **FRIVRA4X4** – 4x4 Inside Vertical 90° Angle Fitting (page C3.36)**



12 **FROV454X4** – 4x4 Outside Vertical 45° Angle Fitting and FROV45SC4** – Optional Split Cover (pages C3.36 and C3.37)**



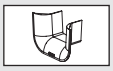
13 **FROVRA4X4** – 4x4 Outside Vertical Right Angle Fitting and FROVRASC4** – Optional Split Cover (page C3.37)**



14 **FRCR4BL-X – Cable Retainer for 4x4 System (page C3.34)**



15 **FREC4X4** – 4x4 End Cap Fitting (page C3.36)**



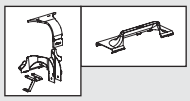
16 **FRTR4X4** – 3-Sided BRC Trumpet Spillout for 4x4 *FIBERRUNNER*® Exit (page C3.40)**



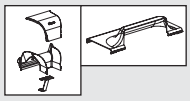
17 **FR1.5IDE** – 1-Port Spillout Side Exit to 1.5" (38mm) Inside Diameter Corrugated Tubing (page C3.40)**



18 **FRIDT4X4** – 2-Port Spillout to 1.5" (38mm) Inside Diameter Corrugated Tubing (page C3.40)**



19 **FRSP** – Spill-Over Junction with 2x2 Exit and FRSP4C** – Optional Cover for 4x4 System (page C3.39)**



20 **FRSP4** – Spill-Over Junction with 4x4 Exit and FRSP44C** – Optional Cover for 4x4 System (pages C3.39 and C3.40)**



21 **FRUPS4X4** – 4x4 Up Spout (page C3.40)**



22 **FRRF4FD2** – 4x4 *FIBERRUNNER*® System to 2x2 Reducer Fitting with Cover (page C3.37)**



23 **FRRF4FD4** – 4x4 *FIBERRUNNER*® System to 4x4 *FIBER-DUCT*™ Reducer Fitting with Cover (page C3.37)**



24 **FRLPR42BL – Low Profile Reducer 4x4 to 2x2 for Vertical Tee (page C3.38)**

**Available colors include: YL (Yellow), OR (Orange), and BL (Black).
Note: Additional 6x4 and 4x4 bracket applications, see page C3.16.

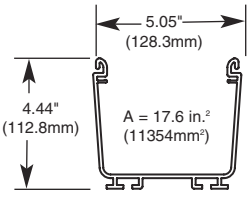
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4x4 *FIBERRUNNER*® Routing System

Cable Fills for 4x4 *FIBERRUNNER*® Cable Routing System

The maximum amounts may vary according to the cable fill installation methods, straightness of cables, etc.





4x4 *FIBERRUNNER*® Cable Routing System							
Fill/Pile Up	Internal Area in²	Diameter 1.6mm .063"	Diameter 2.0mm .079"	Diameter 3.0mm .118"	Augmented Cat. 6 23 AWG/UTP CM Diameter 9mm .354"	Fiber Optic Ribbon Interconnect Cable Diameter 5.20mm .205"	Category 6 Diameter 6.35mm .25"
40% Fill							
2" Pile Up	8.9	1142	731	325	36	108	73
3" Pile Up	13.58	1743	1116	496	55	165	111
4" Pile Up	17.6	2259	1446	643	72	213	143
50% Fill							
2" Pile Up	8.9	1428	914	406	45	135	91
3" Pile Up	13.58	2179	1394	620	69	206	138
4" Pile Up	17.6	2824	1807	803	89	267	179
60% Fill							
2" Pile Up	8.9	1714	1097	487	54	162	109
3" Pile Up	13.58	2615	1673	744	83	247	166
4" Pile Up	17.6	3389	2169	964	107	320	215

Channel cutting instructions: For optimum results, use FRCUT miter box and saw. For larger quantities use a plastic cutting saw blade for clean, burr-free cuts. Recommend: Carbide 80T and 100T; .090" thickness, .125" kerf.

4x4 *FIBERRUNNER*® Routing System – Channel and Covers

- Robust 4x4 system ideal for use with smaller cable counts
- Multiple spillout options provide versatility to mate to various equipment and rack configurations
- *QUIKLOCK*™ Couplers and Brackets reduce system installation time dramatically
- Channel, covers, fittings and other non-metallic system components made from V-0 flame class rated material
- Compatible with all sizes of *PANDUIT*® *FIBERRUNNER*® and *PANDUIT*® *FIBER-DUCT*™ Routing Systems, cable management, and racks
- Compliant with the applicable tests in Telcordia GR-63-CORE Network Equipment Building Systems (NEBS) Level 3



FR4X4



FRHC4



FRSHC4



FRCR4BL-X

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
4x4 *FIBERRUNNER*® Channel			
FR4X4YL6	Used to carry the cables horizontally throughout the system. Accepts hinged cable retainers FRCR4BL-X, hinged cover FRHC4YL6, or split hinged cover FRSHC4YL6. Use *QUIKLOCK*™ Coupler FRBC4X4YL to attach channel and/or fittings.	6	36
4x4 Snap-On Hinged Cover			
FRHC4YL6	Optional snap-on hinged cover for channel FR4X4YL6. Hinge feature enables positioning of cover at angles between 30° to 90°.	6	36
4x4 Split Hinged Cover			
FRSHC4YL6	Optional split hinged cover for the channel FR4X4YL6. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables. Snap-on hinge feature enables positioning of cover at angles between 30° and 90°.	6	36
Cable Retainer for 4x4 System			
FRCR4BL-X	Cable retainer holds cable in the channel when cover is not used. Install anywhere on channel, near the coupler or every 18" (457mm). Black color only.	10	100

For other colors replace YL (Yellow) with OR (Orange) or BL (Black).
Order number of feet required, in multiples of standard 6' length increments.
Order number of cable retainers required, in multiples of Standard Package Quantity.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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4x4 *FIBERRUNNER*® *QUIKLOCK*™ Coupler

- Pre-assembled to provide fast mechanical assembly of components
- No tools required for installation; bolts loosen for component disassembly



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
FRBC4X4YL	Pre-assembled coupler quickly joins two sections of channel and/or fittings. Mechanically attaches without tightening bolts. Bolts release using 3/8" nut driver to allow coupler to be removed if necessary.	1	5

For a bulk package of twenty couplers, order FRBC4X4YL-E.
For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

4x4 *FIBERRUNNER*® System Fittings

- Minimum 2" (50.8mm) bend radius control fittings
- Protects against signal loss and performance degradation
- Assemble using FRBC *QUIKLOCK*™ Couplers
- Optional split covers snap onto each fitting
- Covers feature 3/4" (19mm) gap to allow cable to be laid in



FRRA4X4



FRRASC4



FRH454X4



FRH45SC4

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
4x4 Horizontal Right Angle Fitting				
FRRA4X4YL	Attaches to 4x4 channel and/or fitting to create a 90° horizontal turn from a straight horizontal run. Accepts optional split cover FRRASC4YL.	(2 pcs.) FRBC4X4YL	1	5
Split Cover for 4x4 Horizontal Right Angle Fitting				
FRRASC4YL	Optional split cover for the horizontal right angle fitting FRRA4X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5
4x4 Horizontal 45° Angle Fitting				
FRH454X4YL	Attaches to 4x4 channel and/or fittings to create a 45° horizontal turn from a straight horizontal run. Accepts optional split cover FRH45SC4YL.	(2 pcs.) FRBC4X4YL	1	5
Split Cover for 4x4 Horizontal 45° Angle Fitting				
FRH45SC4YL	Optional split cover for the horizontal 45° angle fitting FRH454X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

Table continued on page C3.36

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4x4 FIBERRUNNER® System Fittings (continued)



FRT4X4



FRTSC4



FRFWC4X4



FRFWCSC4



FREC4X4



FRIVRA4X4



FRIV454X4



FROV454X4

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
4x4 Horizontal Tee Fitting				
FRT4X4YL	Attaches to 4x4 channel and/or fittings to create a 90° horizontal branch from straight horizontal runs. Accepts optional split cover FRTSC4YL.	(3 pcs.) FRBC4X4YL	1	5
Split Cover for 4x4 Horizontal Tee Fitting				
FRTSC4YL	Optional split cover for the horizontal tee fitting FRT4X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5
4x4 4-Way Cross Fitting				
FRFWC4X4YL	Attaches to 4x4 channel and/or fittings to create a horizontal 4-way cross intersection. Accepts optional split cover FRFWCSC4YL.	(4 pcs.) FRBC4X4YL	1	5
Split Cover for 4x4 4-Way Cross Fitting				
FRFWCSC4YL	Optional split cover for the 4-way cross fitting FRFWC4X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5
4x4 End Cap Fitting				
FREC4X4YL	Used for closing off open ends of the channel or fittings. No coupler required. Push-on installation.	—	1	5
4x4 Inside Vertical 90° Angle Fitting				
FRIVRA4X4YL	Attaches to 4x4 channel and/or fittings to create a 90° upward angle from a straight horizontal run. Used with outside vertical 90° angle fitting FROVRA4X4YL to change level of a straight horizontal run. Includes split cover.	(2 pcs.) FRBC4X4YL	1	5
4x4 Inside Vertical 45° Angle Fitting				
FRIV454X4YL	Attaches to 4x4 channel and/or fittings to create a 45° upward angle from a horizontal run. Used with outside vertical 45° angle fitting FROV454X4YL to change level of a straight horizontal run. Includes split cover.	(2 pcs.) FRBC4X4YL	1	5
4x4 Outside Vertical 45° Angle Fitting				
FROV454X4YL	Attaches to 4x4 channel and/or fittings to create a 45° downward angle from a horizontal run. Used with inside vertical 45° angle fitting FRIV454X4YL to change level of a straight horizontal run. Accepts optional split cover FROV45SC4YL.	(2 pcs.) FRBC4X4YL	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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4x4 *FiberRunner*® System Fittings (continued)



FROV45SC4



FROVRA4X4



FROVRASC4



FRRF6FR4



FRRF6FR4SC



FRRF4FD2



FRRF4FD4

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
Split Cover for 4x4 Outside Vertical 45° Angle Fitting				
FROV45SC4YL	Optional split cover for the outside vertical 45° angle fitting FROV454X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5
4x4 Outside Vertical Right Angle Fitting				
FROVRA4X4YL	Attaches to 4x4 channel and/or fittings to create a 90° vertical turn down from a straight horizontal run. Accepts optional split cover FROVRASC4YL.	(2 pcs.) FRBC4X4YL	1	5
Split Cover for 4x4 Outside Vertical Right Angle Fitting				
FROVRASC4YL	Optional split cover for the outside vertical right angle fitting FROVRA4X4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5
6x4 to 4x4 *FiberRunner*® Reducer Fitting				
FRRF6FR4YL	Attaches any 6x4 *FiberRunner*® Fitting or Channel to any 4x4 *FiberRunner*® Fitting or Channel. Accepts split cover FRRF6FR4SCYL.	(1 pc.) FRBC6X4YL (1 pc.) FRBC4X4YL	1	5
Split Cover for 6x4 to 4x4 *FiberRunner*® Reducer Fitting				
FRRF6FR4SCYL	Optional split cover for the 6x4 *FiberRunner*® to 4x4 *FiberRunner*® Reducer Fitting FRRF6FR4YL. Snap-on feature allows cover to be installed and removed with no tools required. Creates radiused 3/4" (19mm) opening for easy access to add or remove cables.	—	1	5
4x4 *FiberRunner*® to 2x2 Reducer Fitting with Cover				
FRRF4FD2YL	Attaches any 4x4 *FiberRunner*® Fitting or Channel to the 2x2 *Fiber-Duct*™ Channel, S2X2YL6 or E2X2YL6 or 2x2 *FiberRunner*® Channel, HS2X2YL6 or H2X2YL6. Note: Attachment to 2x2 *FiberRunner*® Channel requires a *QuikLock*™ Coupler FBC2X2YL. Includes solid cover.	(1 pc.) FRBC4X4YL	1	5
4x4 *FiberRunner*® to 4x4 *Fiber-Duct*™ Reducer Fitting with Cover				
FRRF4FD4YL	Attaches any 4x4 *FiberRunner*® Fitting or Channel to the 4x4 *Fiber-Duct*™ Channel, S4X4YL6 or E4X4YL6. Includes solid cover.	(1 pc.) FRBC4X4YL	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

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4x4 FIBERRUNNER® System Spillouts

- Spill-overs allow safe transition from horizontal to vertical runs
- 2" (50.8mm) bend radius control
- Transition to channel, slotted channel, and corrugated loom tubing
- Spill-over junction fittings can be retro-fitted to existing horizontal runs



FRVT4X4



FTR4X4



FIDT4X4BL



FRHD4KT



TRC4HDBL



FRLPR42BL

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
4x4 QUIKLOCK™ Vertical Tee				
FRVT4X4YL	Attaches to 4x4 channel and/or fittings to create a 90° vertical drop from a horizontal run. Hinged door included. Accepts FTR4X4YL, FIDT4X4BL, S4X4YL6 or E4X4YL6 directly. Accepts optional snap-on cover FRHC4YL6 in conjunction with channel.	(2 pcs.) FRBC4X4YL	1	5
3-Sided Vertical Tee Trumpet Spillout				
FTR4X4YL	Used to limit the bend radius of the cable to 2" (50.8mm) when exiting from a 4x4 or 6x4 FIBERRUNNER® Vertical Tee and 4x4 FIBER-DUCT™ Fittings.	—	1	5
2-Port Spillout to 1.5" (38mm) Inside Diameter Corrugated Tubing				
FIDT4X4BL	Used to route cable into one or two pieces of 1.5" (38mm) diameter split corrugated tubing. Used with FRVT6X4YL, FRVT4X4YL, or FVT4X4YL. Securely holds corrugated split tubing to ensure system integrity and easy access to add or remove cables. Black color only.	—	1	5
4x4 Hinged Duct Vertical Cable Manager Kit				
FRHD4KTYL	Provides secure, accessible route for cables spilling out from vertical tee to rack mounted equipment. Kit includes 6' length of 4x4 capacity hinged duct, 6' length of 4x4 hinged duct cover, one end cap for 4x4 hinged duct, three FZBA1.5X4 adjustable "Z" brackets, an adapter fitting, six WR4-C wire retainers and all required mounting hardware. Attaches directly to 6x4 and 4x4 vertical tee exit or FRLPR64 low profile reducer.	—	1	—
4x4 Hinged Duct Bend Radius Control Trumpet				
TRC4HDBL	Bend radius control trumpet for exiting at the sidewall of 4" wall heights of type H hinged cover wiring duct channels. Maintains 1" (25.4mm) bend radius control. Black color only.	—	1	—
Low Profile Reducer 4x4 to 2x2 for Vertical Tee				
FRLPR42BL	Assembled into the 6x4 vertical tee FRVT6X4YL or 4x4 vertical tee FRVT4X4YL with an audible snap, the FRLPR42BL allows for the transition to 2x2 FIBERRUNNER® or 2x2 FIBER-DUCT™ Channel with minimal space required. No tools required for assembly. Black color only.	—	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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4x4 *FIBERRUNNER*® System Spillouts (continued)



FRSP



FRSP4C



FTR2X2



FIDT2X2



FRHD2KT



TRC2HDBL



FRSP4

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
Spill-Over Junction with 2x2 Exit				
FRSPYL	Assembles onto 4x4, 6x4, or 12x4 *FIBERRUNNER*® Channel, spilling over the side into a 2x2 vertical channel, fitting, or corrugated tube. Mounts directly to existing installation with no alteration required. Mounting hardware provided for secure attachment.	—	1	—
Cover for Spill-Over Junction with 2x2 Exit for 4x4 Channel				
FRSP4CYL	Used to fully enclose 4x4 channel in conjunction with the spill-over junction FRSPYL. Cover snaps onto the channel base. Hinged feature allows easy access to add or remove cables.	—	1	5
3-Sided BRC Trumpet Spillout for 2x2 Exit				
FTR2X2YL	Used to limit the bend radius of the cable to 2" (50.8mm) when exiting from a *FIBERRUNNER*® Spill-Over FRSPYL or from 2x2 *FIBER-DUCT*™ Channel.	(1 pc.) FBC2X2YL	1	5
1-Port Spillout to 1.5" (38mm) Inside Diameter Corrugated Tubing				
FIDT2X2YL	Used to route cable into one piece of 1.5" (38mm) diameter split corrugated tubing. Used with *FIBERRUNNER*® Spill-Over FRSPYL, 2x2 *FIBER-DUCT*™ Fittings, and the 2x2 *FIBERRUNNER*® Hinged Channel. Securely holds split corrugated tubing to ensure system integrity and easy access to add or remove cables.	(1 pc.) FBC2X2YL	1	5
2x2 Hinged Duct Vertical Cable Manager Kit				
FRHD2KTYL	Provides secure, accessible route for cables spilling out from a vertical tee or spill-over junction to rack mounted equipment. Kit includes 6' length of 2x2 *FIBERRUNNER*® Hinged Channel H2X2YL6, 6' length of 2x2 snap-on hinged cover HC2YL6, four adjustable "Z" brackets FZBA1.5X4, one *FIBERRUNNER*® 2x2 End Cap FHDEC2X2YL, six hinged duct 2" wire retainers WR2H-C and all required mounting hardware. Attaches to 2x2 vertical tee exit or spill-over junction with a 2x2 exit with a 2x2 *QUIKLOCK*™ Coupler FBC2X2YL. Also attaches directly to 4x4 or 6x4 vertical tee exits with low profile reducer FRLPR42BL. Yellow and orange colors only.	—	1	—
2x2 *FIBERRUNNER*® Bend Radius Control Trumpet				
TRC2HDBL	Bend radius control trumpet for exiting at the sidewall of 2" wall heights of type H hinged cover wiring duct channels. Maintains 1" (25.4mm) bend radius control. Black color only.	—	1	10
Spill-Over Junction with 4x4 Exit				
FRSP4YL	Assembles onto 4x4, 6x4, or 12x4 *FIBERRUNNER*® Channel, spilling over the side into a 4x4 vertical exit. Requires coupler to attach 4x4 *FIBERRUNNER*® Channel and Fittings to the vertical exit. Mounts directly to existing installation with no alteration required. Mounting hardware provided for secure attachment.	(1 pc.) FRBC4X4YL	1	—

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

Table continued on page C3.40

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4x4 FIBERRUNNER® System Spillouts (continued)



FRSP44C



FRTR4X4



FRIDT4X4



FR1.5IDE



FRUPS4X4

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
Cover for Spill-Over Junction with 4x4 Exit for 4x4 Channel				
FRSP44CYL	Used to fully enclose the 4x4 channel in conjunction with the spill-over junction FRSP4YL. Cover snaps onto the channel base. Hinged feature allows easy access to add or remove cables.	—	1	5
3-Sided BRC Trumpet Spillout for 4x4 FIBERRUNNER® Exit				
FRTR4X4YL	Used to limit the bend radius of the cable to 2" (50.8mm) when exiting from 4x4 FIBERRUNNER® Channel or a 4x4 FIBERRUNNER® Horizontal Tee.	(1 pc.) FRBC4X4YL	1	5
2-Port Spillout to 1.5" (38mm) Inside Diameter Corrugated Tubing				
FRIDT4X4YL	Used to route cable into one or two pieces of 1.5" (38mm) diameter split corrugated tubing. Requires coupler to be used with 4x4 FIBERRUNNER® Fitting. Used with any 4x4 FIBERRUNNER® Fitting. Securely holds corrugated split tubing to ensure system integrity and easy access to add or remove cables.	(1 pc.) FRBC4X4YL	1	5
1-Port Spillout Side Exit to 1.5" (38mm) Inside Diameter Corrugated Tubing				
FR1.5IDEYL	Used to route cable into 1.5" (38mm) diameter split corrugated tubing directly through a hole cut in the side wall of the 4x4, 6x4, and 12x4 FIBERRUNNER® Channel or 4x4 FIBER-DUCT™ Channel. Provides 1" (25.4mm) bend radius control at the exit. Securely holds split corrugated tubing to ensure system integrity and easy access to add or remove cables. Includes drilling template.	—	1	5
4x4 Up Spout				
FRUPS4X4YL	Allows cable to be directed upward out of the channel deployed directly below racks and cabinets in underfloor installations. Provides 2" (50.8mm) bend radius. Snaps directly onto the channel and can be positioned to allow cables to be laid in. A 1" (25.4mm) top bezel is included. Other fittings can be installed for specific applications including FTR4X4YL and FIDT4X4BL.	—	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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FIBERRUNNER® Accessories


FRCUT


FR38DR


FR716DR


FR516DR


FRUIB-X


FRSSM2


FRSTRCLIP


FRTBKT-X

Part Number	Part Description	For Threaded Rod Size	Std. Pkg. Qty.	Std. Ctn. Qty.
Miter Box and Saw				
FRCUT	Used to cut 2x2, 4x4, and 6x4 FIBERRUNNER® Channel and Hinged Cover, 4x4 FIBER-DUCT™ Channel and Cover and 2x2 FIBER-DUCT™ Channel and Cover.	—	1	—
3/8" Nut Driver				
FR38DR	Used to disassemble 4x4, 6x4, and 12x4 FIBERRUNNER® QUIKLOCK™ Couplers when required.	—	1	10
7/16" Nut Driver				
FR716DR	Used to assemble QUIKLOCK™ Bracket slide clamps.	—	1	10
5/16" Nut Driver				
FR516DR	Used to disassemble 2x2 FIBERRUNNER® QUIKLOCK™ Couplers when required.	—	1	10
Universal Innerduct Bracket				
FRUIB-X	Used to secure any size corrugated tubing or inner-duct to any surface including equipment racks and channel or fittings. Two 1/4" (6.3 mm) holes must be drilled through to secure brackets.	—	10	100
Slack Spool Manager with 2.37" Bend Radius Diameter				
FRSSM2	The slack spool manager can be mounted in 12x4, 6x4, and 4x4 FIBERRUNNER® Channels and in 4x4 FIBER-DUCT™ Channel to create an in-channel slack management. It can be deployed in a vertical or horizontal channel run and can withstand a 20 lb. load without pulling away from the base. Mounting fasteners are included.	—	1	5
Strut Clip Kit				
FRSTRCLIP	Strut mounting clip assembly allows FIBERRUNNER® Channel to be attached directly to standard 1 5/8" wide strut structures. Contains two clips and all hardware for assembly. Bolts release with 7/16" nut driver.	—	1	10
1/4" T-Bolt Kit				
FRTBKT-X	T-bolts can be used for additional attachment when securing FIBERRUNNER® Channel to mounting brackets. For example, a T-bolt can be inserted thru a 12x4 mounting bracket and positioned within the center rib structure on the underside of 12x4 channel. By tightening the nut, the 12x4 channel is more securely fastened to the mounting bracket.	—	10	100

Table continued on page C3.42

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FIBERRUNNER® Accessories (continued)



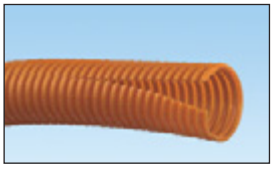
FRQMC-X



TR1-12-X
TR1-58-X



TRC18FR-X8



CLT150F-X3

Part Number	Part Description	For Threaded Rod Size	Std. Pkg. Qty.	Std. Ctn. Qty.
FIBERRUNNER® Quick Mount Clips				
FRQMC-X	Used wherever additional FIBERRUNNER® Slide Clamps would be helpful. For example, use on 12x4 FIBERRUNNER® QUIKLOCK™ Brackets to accommodate dual runs of 6x4 or 4x4 FIBERRUNNER® Channel.	—	10	100
Threaded Rod in 1' Lengths				
TR1-12-X	Threaded rod can be used with various mounting brackets. Length = 12" (305mm)	1/2"	10	—
TR1-58-X	Threaded rod can be used with various mounting brackets.	5/8"	10	—
Threaded Rod Cover				
TRC18FR-X8	Used to protect cabling from threaded rod. Vertical slit allows easy installation. Material meets UL 94V-0 specifications. For indoor use only. Available in 18" Lengths.	1/2" – 5/8"	10	100
Slit Corrugated Loom Tubing				
CLT150F-X3*	Slit corrugated loom tubing provides a vertical pathway as cables transfer from the FIBERRUNNER® Fitting to the equipment below. Inside diameter is 1.5" (38.1mm) and outside diameter 1.7" (43.2mm). Sold in 10' rolls.	—	1	—

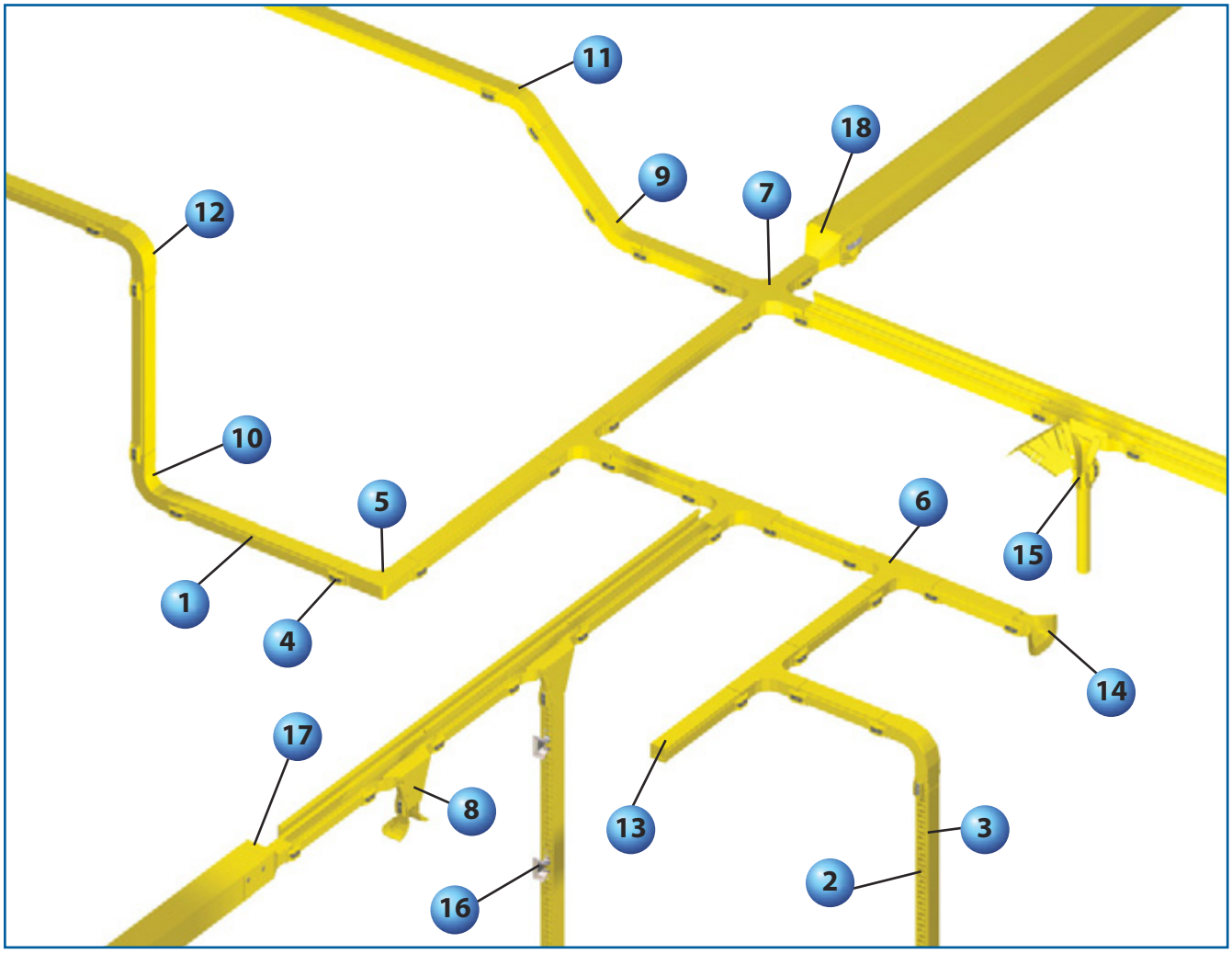
*For other colors replace suffix X3 (Orange) with X4 (Yellow) or X20 (Black).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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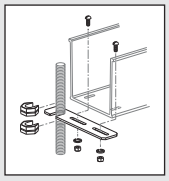
NOTES

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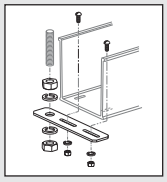
2x2 FIBER RUNNER® Routing System Roadmap



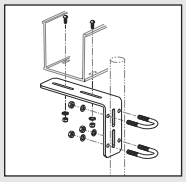
FIBER-DUCT™ Mounting Brackets



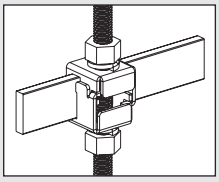
FTRBE12 – Existing Threaded Rod Bracket (page C3.57)



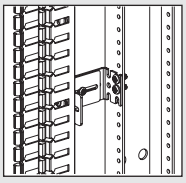
FTRBN12 – New Threaded Rod Bracket (page C3.57)



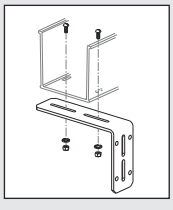
FUSB – Underfloor Pedestal Bracket (page C3.57)



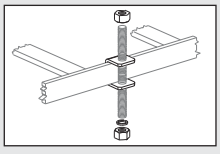
F2PCLB12 – Two-Piece Ladder Rack Bracket for Attaching Threaded Rod to 1 1/2" – 2" Ladder Rack (page C3.58)



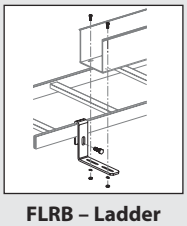
FZBA1.5X4 – Adjustable "Z" Bracket (page C3.57)



FLB – "L" Wall Mount Bracket (page C3.57)

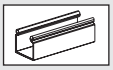


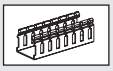
FLB12X20 – Bracket for Attaching Threaded Rod Ladder Rack (page C3.57)



FLRB – Ladder Rack Bracket (page C3.57)

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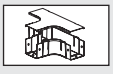

1. HS2X2**6 – 2x2 *FIBERRUNNER*® Hinged Channel (page C3.46)

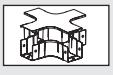

2. H2X2**6 – 2x2 *FIBERRUNNER*® Hinged Slotted Channel (page C3.46)

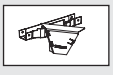

3. HC2**6 – 2x2 *FIBERRUNNER*® Snap-On Hinged Cover (page C3.46)


4. FBC2X2** – 2x2 *QUIKLOCK*™ Coupler (page C3.47)

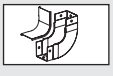

5. FRA2X2** – 2x2 Horizontal Right Angle Fitting (page C3.54)

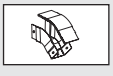

6. FT2X2** – 2x2 Horizontal Tee Fitting (page C3.54)

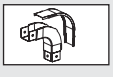

7. FFWC2X2** – 2x2 4-way Cross Fitting (page C3.54)


8. FVTHD2X2** – 2x2 Vertical Tee (page C3.48)


9. FIV452X2** – 2x2 Inside Vertical 45° Angle Fitting (page C3.54)

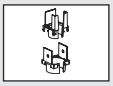

10. FIVRA2X2** – 2x2 Inside Vertical Right Angle Fitting (page C3.54)


11. FOV452X2** – 2x2 Outside 45° Angle Fitting (page C3.54)


12. FOVRA2X2** – 2x2 Outside Vertical Right Angle Fitting (page C3.54)


13. FHDEC2X2** – 2x2 End Cap Fitting (page C3.47)


14. FTR2X2** – 3-Sided BRC Trumpet Spillout for 2x2 Exit (page C3.48)


15. FIDT2X2** – 1-Port Spillout to 1.5" (38mm) Inside Diameter Corrugated Tubing (page C3.48)


16. TRC2HDBL – 2x2 Hinged Channel 1" Bend Radius Control Trumpet (page C3.48)


17. FRF42** – 4x4 to 2x2 *FIBER-DUCT*™ Reducer Fitting (page C3.54)


18. FRRF4FD2** – 4x4 *FIBERRUNNER*® to 2x2 Reducer Fitting (page C3.37)

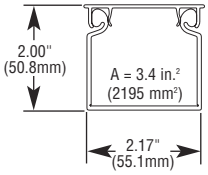
**Available colors include: YL (Yellow), OR (Orange), and BL (Black).

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2x2 *FIBERRUNNER*® Routing System

Cable Fills for 2x2 *FIBERRUNNER*® Cable Routing System





The maximum amounts may vary according to the cable fill installation methods, straightness of cables, etc.

2x2 *FIBERRUNNER*® Cable Routing System							
Fill/Pile Up	Internal Area In.²	Diameter 1.6mm .063"	Diameter 2.0mm .079"	Diameter 3.0mm .118"	Augmented Cat. 6 23 AWG/UTP CM Diameter 9mm .354"	Fiber Optic Ribbon Interconnect Cable Diameter 5.20mm .205"	Category 6 Diameter 6.35mm .25"
40% Fill							
2" Pile Up	3.4	436	279	124	14	41	28
50% Fill							
2" Pile Up	3.4	546	349	155	17	52	35
60% Fill							
2" Pile Up	3.4	655	419	186	21	62	42

Channel cutting instructions: For optimum results, use FRCUT miter box and saw. For larger quantities use a plastic cutting saw blade for clean, burr-free cuts. Recommend: Carbide 80T and 100T; .090" thickness, .125" kerf.

2x2 *FIBERRUNNER*® Routing System – Channels and Cover

- 2x2 system ideal for use with smaller cable counts
- Multiple spillout options provide versatility to mate to various equipment and rack configurations
- *QUIKLOCK*™ Couplers reduce system installation time dramatically
- Channel, covers, fittings and other non-metallic system components made from V-0 flame class rated material
- Compatible with all sizes of *PANDUIT*® *FIBERRUNNER*® and *PANDUIT*® *FIBER-DUCT*™ Routing Systems, cable management, and racks
- 2x2 *FIBERRUNNER*® Hinged and Slotted Channels can be used with 2x2 *FIBER-DUCT*™ fittings (see page C3.54) and brackets (see pages C3.57,C3.58)
- Compliant with the applicable tests in Telcordia GR-63-CORE Network Equipment Building Systems (NEBS) Level 3



HS2X2



H2X2



HC2



WR2H-C

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
2x2 *FIBERRUNNER*® Hinged Channel			
HS2X2YL6NM	Used to carry the cables throughout the system. Accepts hinged cover HC2YL6. Use *QUIKLOCK*™ Coupler FBC2X2YL to attach channel and/or fittings.	6	120
2x2 *FIBERRUNNER*® Hinged Slotted Channel			
H2X2YL6	Used to carry the cables vertically to the front or the back of equipment racks throughout the system. Accepts hinged cover HC2YL6. Extra supports required when used in horizontal applications. Use *QUIKLOCK*™ Coupler FBC2X2YL to attach channel and/or fittings.	6	120
2x2 Snap-On Hinged Cover			
HC2YL6	Optional snap-on cover for hinged channel HS2X2YL6 or H2X2YL6. The innovative cover can hinge open to 90° from either side of the channel and be removed completely if desired.	6	120
Cable Retainer for 2x2 System			
WR2H-C	Cable retainer can be installed between the slotted channel (H2X2YL6) fingers to retain cables. It can be used with cover and installs anywhere on channel. One retainer should be used approximately every 18" (457mm). Black color only.	100	1000

Note: Available with mounting holes. To order, delete NM from the part number.
For other colors replace YL (Yellow) with OR (Orange) or BL (Black).
Order number of feet required, in multiples of standard 6' length increments.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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2x2 FIBERRUNNER® QUIKLOCK™ Coupler

- Pre-assembled to provide fast mechanical assembly of components
- No tools required for installation; bolts loosen for component disassembly



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
FBC2X2YL	Pre-assembled coupler quickly joins two sections of hinged channel and/or fittings. Mechanically attaches without tightening bolts. Bolts release using 5/16" nut driver to allow coupler to be removed if necessary.	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

2x2 FIBERRUNNER® System Fittings



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
FHDEC2X2YL	Used for closing off open ends of the hinged channel or fittings. No coupler required. Push-on installation.	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

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2x2 FIBERRUNNER® System Spillouts

- Spill-overs allow safe transition from horizontal to vertical runs
- 2" bend radius control
- Transition to channel, slotted channel, and corrugated loom tubing



FVTHD2X2



FTR2X2



FIDT2X2



FRHD2KT



TRC2HDBL

Part Number	Part Description	Couplers Required	Std. Pkg. Qty.	Std. Ctn. Qty.
2x2 Vertical Tee				
FVTHD2X2YL	Attaches to 2x2 channel to create a 90° vertical drop from a horizontal run. Hinged door included. Accepts channel cover in conjunction with channel. Use QUIKLOCK™ Coupler FBC2X2YL with HS2X2YL6 or H2X2YL6 channels. Use snap rivets NR2WH-L or bolts F14PN-L with S2X2YL6 or E2X2YL6 channels. Also accepts FIDT2X2YL.	(2 pcs.) FBC2X2YL	1	5
3-Sided BRC Trumpet Spillout for 2x2 Exit				
FTR2X2YL	Used to limit the bend radius of the cable to 2" (50.8mm) when exiting from a FIBERRUNNER® Spill-Over FRSPYL or from 2x2 FIBER-DUCT™ Channel.	(1 pc.) FBC2X2YL	1	5
1-Port Spillout to 1.5" (38mm) Inside Diameter Corrugated Tubing				
FIDT2X2YL	Used to route cable into one piece of 1.5" (38mm) diameter split corrugated tubing. Used with FIBERRUNNER® Spill-Over FRSPYL, 2x2 Fiber-Duct™ Fittings, and the 2x2 FIBERRUNNER® Hinged Channel. Securely holds split corrugated tubing to ensure system integrity and easy access to add or remove cables.	(1 pc.) FBC2X2YL	1	5
2x2 Hinged Duct Vertical Cable Manager Kit				
FRHD2KTYL	Provides secure, accessible route for cables spilling out from a vertical tee or spill-over junction to rack mounted equipment. Kit includes 6' length of 2x2 FIBERRUNNER® Hinged Channel H2X2YL6, 6' length of 2x2 snap-on hinged cover HC2YL6, four adjustable "Z" brackets FZBA1.5X4, one FIBERRUNNER® 2x2 End Cap FHDEC2X2YL, six hinged duct 2" wire retainers WR2H-C and all required mounting hardware. Attaches to 2x2 vertical tee exit or spill-over junction with a 2x2 exit with a 2x2 QUIKLOCK™ Coupler FBC2X2YL. Also attaches directly to 4x4 or 6x4 vertical tee exits with low profile reducer FRLPR42BL. Yellow and orange colors only.	—	1	—
2x2 FIBERRUNNER® Bend Radius Control Trumpet				
TRC2HDBL	Bend radius control trumpet for exiting at the sidewall of 2" wall heights of type H hinged cover wiring duct channels. Maintains 1" (25.4mm) bend radius control. Black color only.	—	1	10

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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FIBER-DUCT™ ROUTING SYSTEMS

PANDUIT provides leading solutions for cable routing. These routing products are compatible with our cable management solutions increasing your ability to maintain an orderly and clean work environment, implement quick and easy moves, adds, and changes and maintain the integrity of your fiber and copper cabling plant in order to maximize long-term performance.

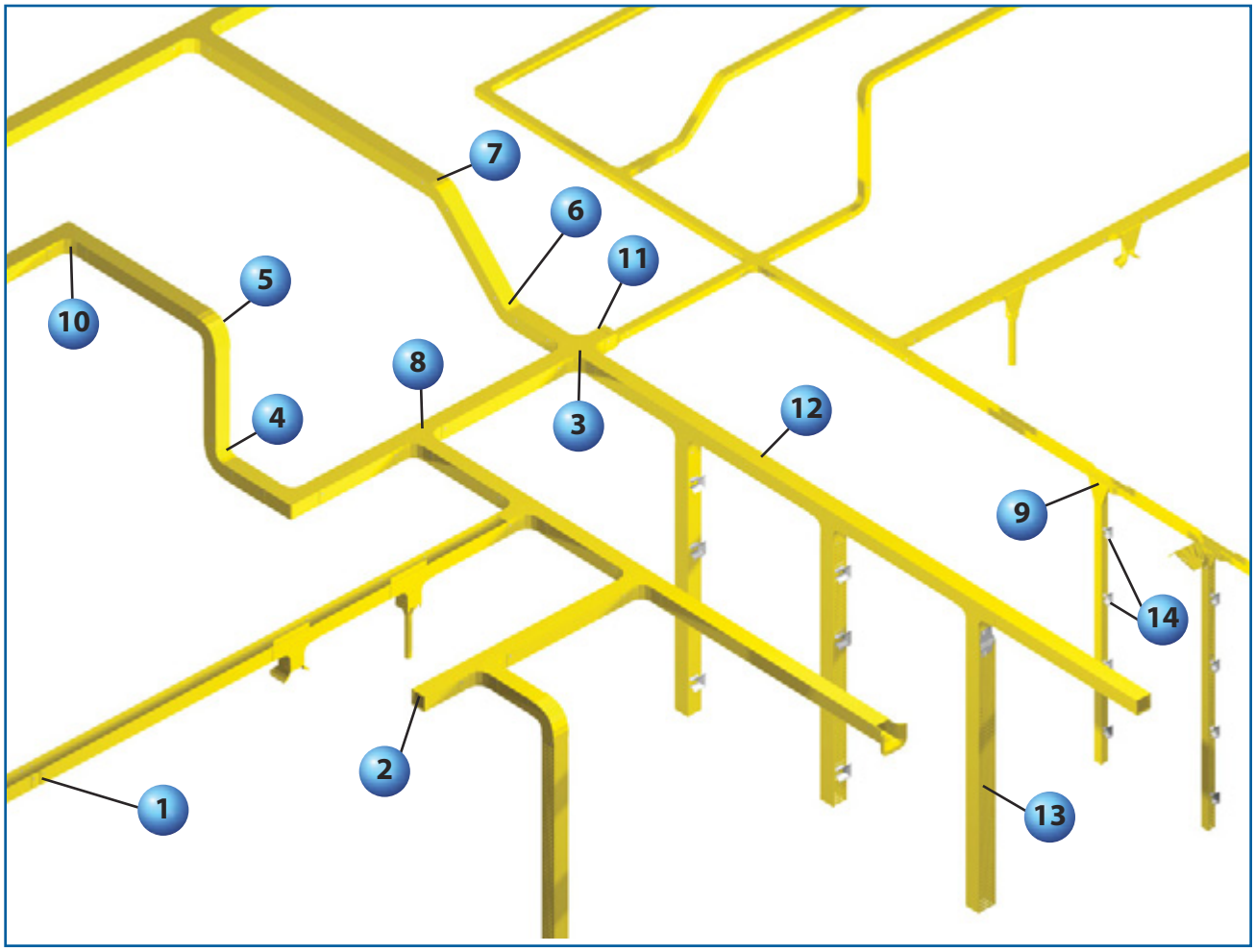


- **Two system sizes available: 4x4 and 2x2**
- **Minimum 2" (50.8mm) bend radius fittings protect against signal loss due to excessive cable bends**
- **Optimized for use with *PAN-NET*® Network Solutions**
- **Snap-on non-slip covers**
- **Compatible with *PANDUIT*® *FIBERRUNNER*® 12x4, 6x4, 4x4 and 2x2 Routing Systems**

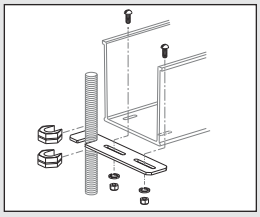
The 2x2 and 4x4 *FIBER-DUCT*™ Routing Systems are comprised of channel, fittings, and brackets designed to segregate, route, and protect fiber optic and copper cabling to and between racks within the telecommunications room.

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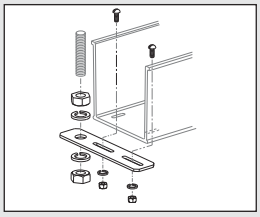
2x2 and 4x4 FIBER-DUCT™ Routing Systems Roadmap



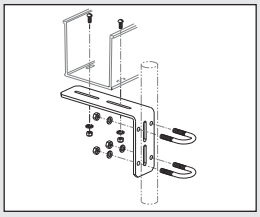
FIBER-DUCT™ Mounting Brackets



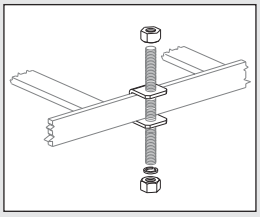
FTRBE12 – Existing Threaded Rod Bracket (page C3.57)



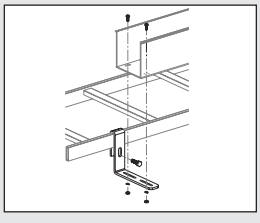
FTRBN12 – New Threaded Rod Bracket (page C3.57)



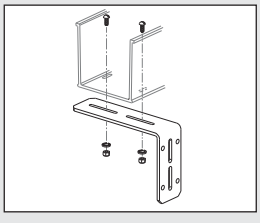
FUSB – Underfloor Pedestal Bracket (page C3.57)



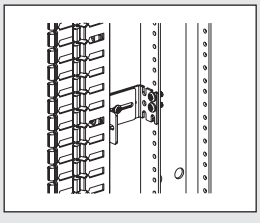
FLB12X15 – Bracket for Attaching Threaded Rod to Ladder Rack (page C3.57)



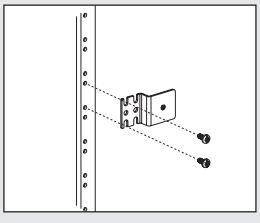
FLRB – Ladder Rack Bracket (page C3.57)



FLB – "L" Wall Mount Bracket (page C3.57)

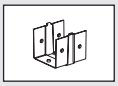


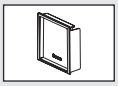
FZBA1.5X4 – Adjustable "Z" Bracket (page C3.57)

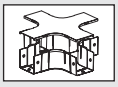


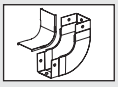
FZBLP – Low Profile "Z" Bracket (page C3.57)

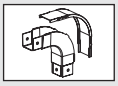
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1 FCF2X2** and FCF4X4 – Coupler Fitting (page C3.54)

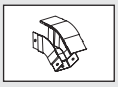

2 FEC2X2** and FEC4X4** – End Cap Fitting (page C3.54)

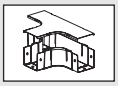

3 FFWC2X2** and FFWC4X4** – 4-Way Cross Fitting (page C3.54)

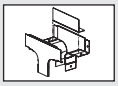

4 FIVRA2X2** and FIVRA4x4** – Inside Vertical Right Angle (page C3.54)


5 FOVRA2X2** and FOVRA4X4** – Outside Vertical Right Angle (page C3.54)

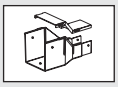

6 FIV452X2** and FIV454X4** – Inside Vertical 45° Angle (page C3.54)

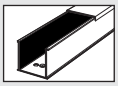

7 FOV452X2** and FOV454X4** – Outside Vertical 45° Angle (page C3.54)


8 FT2X2** and FT4X4** – Horizontal Tee Fitting (page C3.54)

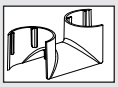

9 FVT4X4** – 4x4 Vertical Tee (page C3.55)


10 FRA2X2** – FRA4X4** – Right Angle Fitting (page C3.54)


11 FRF42** – 4x4 to 2x2 *FIBER-DUCT*™ Reducer Fitting (page C3.54)


12 S2X2**6NM and S4X4**6NM *FIBER-DUCT*™ Channel (page C3.53)


13 E2X2**6 and E4X4**6 *FIBER-DUCT*™ Slotted Channel (page C3.53)


14 TRC2BL and TRC4BL – Bend Radius Control Trumpet (page C3.56)

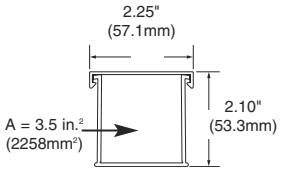
**Available colors include: YL (Yellow), OR (Orange), and BL (Black).

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2x2 and 4x4 *FIBER-DUCT*™ Routing Systems

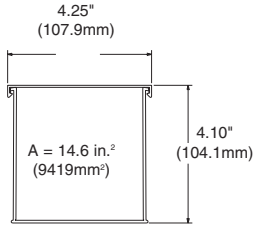
Cable Fills for 2x2 and 4x4 *FIBER-DUCT*™ Cable Routing Systems

The maximum amounts may vary according to the cable fill installation methods, straightness of cables, etc.



2x2 *FIBER-DUCT*™ Cable Routing System							
Fill/Pile Up	**Internal Area in.²**	**Diameter 1.6mm .063"**	**Diameter 2.0mm .079"**	**Diameter 3.0mm .118"**	**Augmented Cat. 6 23 AWG/UTP CM Diameter 9mm .354"**	**Fiber Optic Ribbon Interconnect Cable Diameter 5.20mm .205"**	**Category 6 Diameter 6.35mm .25"**
40% Fill							
2" Pile Up	3.5	449	288	128	14	42	29
50% Fill							
2" Pile Up	3.5	562	359	160	18	53	36
60% Fill							
2" Pile Up	3.5	674	431	192	21	64	43

Channel cutting instructions: For optimum results, use FRCUT miter box and saw. For larger quantities use a plastic cutting saw blade for clean, burr-free cuts. Recommend: Carbide 80T and 100T; .090" thickness, .125" kerf.



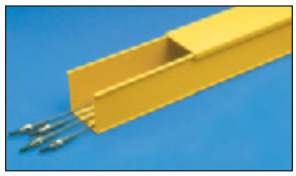
4x4 *FIBER-DUCT*™ Cable Routing System							
Fill/Pile Up	**Internal Area in.²**	**Diameter 1.6mm .063"**	**Diameter 2.0mm .079"**	**Diameter 3.0mm .118"**	**Augmented Cat. 6 23 AWG/UTP CM Diameter 9mm .354"**	**Fiber Optic Ribbon Interconnect Cable Diameter 5.20mm .205"**	**Category 6 Diameter 6.35mm .25"**
40% Fill							
2" Pile Up	7.60	976	624	277	31	92	62
3" Pile Up	11.30	1450	928	413	46	137	92
4" Pile Up	14.60	1874	1199	533	59	177	119
50% Fill							
2" Pile Up	7.60	1219	780	347	39	115	77
3" Pile Up	11.30	1813	1160	516	57	171	115
4" Pile Up	14.60	2343	1499	666	74	221	149
60% Fill							
2" Pile Up	7.60	1463	936	416	46	138	93
3" Pile Up	11.30	2176	1392	619	69	205	138
4" Pile Up	14.60	2811	1799	800	89	265	178

Channel cutting instructions: For optimum results, use FRCUT miter box and saw. For larger quantities use a plastic cutting saw blade for clean, burr-free cuts. Recommend: Carbide 80T and 100T; .090" thickness, .125" kerf.

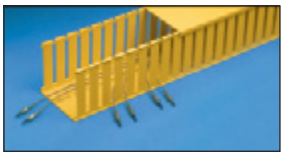
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2x2 and 4x4 *FIBER-DUCT*™ Routing Systems

- Channel, covers, fittings and other non-metallic system components made from V-0 flame class rated material
- Snap-on non-slip covers
- Compatible with *PANDUIT*® *FIBERRUNNER*® 2x2, 4x4, 6x4 and 12x4 Routing Systems



S2X2
S4X4



E2X2
E4X4



C2
C4

Part Number	Part Description	System Size	Std. Pkg. Qty.	Std. Ctn. Qty.
***FIBER-DUCT*™ Channel**				
S2X2YL6NM	Used to carry the cables throughout the *FIBER-DUCT*™ Routing System. Accepts cover C2YL6. Cover sold separately.	2x2	6	120
S4X4YL6NM	Used to carry the cables throughout the *FIBER-DUCT*™ Routing System. Accepts cover C4YL6. Cover sold separately.	4x4	6	60
***FIBER-DUCT*™ Slotted Channel**				
E2X2YL6	Used to carry the cables vertically to the front or the back of equipment racks throughout the system. Accepts cover C2YL6. Extra supports required when used in horizontal applications. Cover sold separately.	2x2	6	120
E4X4YL6	Used to carry the cables vertically to the front or the back of equipment racks throughout the system. Accepts cover C4YL6. Extra supports required when used in horizontal applications. Cover sold separately.	4x4	6	60
***FIBER-DUCT*™ Cover**				
C2YL6	Cover for *FIBER-DUCT*™ Channel and *FIBER-DUCT*™ Slotted Channel. Non-slip cover design incorporates integral high friction lining to inhibit cover movement.	2x2	6	120
C4YL6	Cover for *FIBER-DUCT*™ Channel and *FIBER-DUCT*™ Slotted Channel. Non-slip cover design incorporates integral high friction lining to inhibit cover movement.	4x4	6	120

Note: Available with mounting holes. To order, delete NM from the part number.
For fastest installation use NR2WH-L or NR4BL-L snap rivets.
For other colors replace YL (Yellow) with OR (Orange) or BL (Black).
Order number of feet required, in multiples of standard 6' length increments.

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FIBER-DUCT™ System Fittings



FCF2X2
FCF4X4



FRA2X2
FRA4X4



FT2X2
FT4X4



FFWC2X2
FFWC4X4



FEC2X2
FEC4X4



FIV452X2
FIV454X4



FOV452X2
FOV454X4



FIVRA2X2
FIVRA4X4



FOVRA2X2
FOVRA4X4



FRF42

Part Number	Part Description	System Size	Std. Pkg. Qty.	Std. Ctn. Qty.
Coupler Fitting				
FCF2X2YL	Used to join two sections of duct together. FIBER-DUCT™ Coupler is not required at each fitting connection.	2x2	1	5
FCF4X4YL		4x4	1	5
Horizontal Right Angle Fitting				
FRA2X2YL	Attaches to channel to create a 90° horizontal turn from a straight horizontal run. Cover included.	2x2	1	5
FRA4X4YL		4x4	1	5
Horizontal Tee Fitting				
FT2X2YL	Attaches to channel to create a 90° horizontal branch from a straight horizontal run. Cover included.	2x2	1	5
FT4X4YL		4x4	1	5
4-Way Cross Fitting				
FFWC2X2YL	Attaches to channel to create a horizontal 4-way cross intersection. Cover included.	2x2	1	5
FFWC4X4YL		4x4	1	5
End Cap Fitting				
FEC2X2YL	Used for closing off open ends of the channel. No coupler required. Push-on installation.	2x2	1	5
FEC4X4YL		4x4	1	5
Inside Vertical 45° Angle Fitting				
FIV452X2YL	Attaches to channel to create a 45° upward angle from a straight horizontal run. Used with outside vertical 45° angle fitting FOV452X2YL or FOV454X4YL to change level of straight horizontal runs. Cover included.	2x2	1	5
FIV454X4YL		4x4	1	5
Outside Vertical 45° Angle Fitting				
FOV452X2YL	Attaches to channel to create a 45° downward angle from a straight horizontal run. Used with inside vertical 45° angle fitting FIV452X2YL or FIV454X4YL to change level of straight horizontal runs. Cover included.	2x2	1	5
FOV454X4YL		4x4	1	5
Inside Vertical Right Angle Fitting				
FIVRA2X2YL	Attaches to channel to create a 90° upward angle from a straight horizontal run. Used with outside vertical 90° angle fitting FOVRA2X2YL or FOVRA4X4YL to change level of straight horizontal runs. Cover included.	2x2	1	5
FIVRA4X4YL		4x4	1	5
Outside Vertical Right Angle Fitting				
FOVRA2X2YL	Attaches to channel to create a 90° downward angle from a straight horizontal run. Used with inside vertical 90° angle fitting FIVRA2X2YL or FIVRA4X4YL to change level of straight horizontal runs. Cover included.	2x2	1	5
FOVRA4X4YL		4x4	1	5
4x4 to 2x2 FIBER-DUCT™ Reducer Fitting				
FRF42YL	Joins any 4x4 FIBER-DUCT™ Fitting to the 2x2 FIBER-DUCT™ Channel, S2X2YL6 or E2X2YL6. Includes cover.	2x2 4x4	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).
Fittings include 5/16" assembly holes for fast mechanical fastening.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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FIBER-DUCT™ Spillouts


FVTHD2X2


FTR2X2


FIDT2X2


FVT4X4


FTR4X4


FIDT4X4BL

Part Number	Part Description	System Size	Std. Pkg. Qty.	Std. Ctn. Qty.
2x2 Vertical Tee				
FVTHD2X2YL	Attaches to 2x2 channel to create a 90° vertical drop from a horizontal run. Hinged door included. Accepts channel cover in conjunction with channel. Use QUIKLOCK™ Coupler FBC2X2YL with HS2X2YL6 or H2X2YL6 channels. Use snap rivets NR2WH-L or bolts F14PN-L with S2X2YL6 or E2X2YL6 channels. Also accepts FIDT2X2YL.	2x2	1	5
3-Sided BRC Trumpet Spillout for 2x2 Exit				
FTR2X2YL	Used to limit the bend radius of the cable to 2" (50.8mm) when exiting from a FIBERRUNNER® Spill-Over FRSPYL or from 2x2 FIBER-DUCT™ Channel.	2x2	1	5
1-Port Spillout to 1.5" (38mm) Inside Diameter Corrugated Tubing				
FIDT2X2YL	Used to route cable into one piece of 1.5" (38mm) diameter split corrugated tubing. Used with FIBERRUNNER® Spill-Over FRSPYL, 2x2 FIBER-DUCT™ Fittings, and the 2x2 FIBERRUNNER® Hinged Channel. Securely holds split corrugated tubing to ensure system integrity and easy access to add or remove cables.	2x2	1	5
4x4 Vertical Tee				
FVT4X4YL	Attaches to channel to create a 90° vertical drop from a horizontal run. Accepts FIDT4X4BL, FTR4X4YL, S4X4YL6 or E4X4YL6 directly.	4x4	1	5
3-Sided Vertical Tee Trumpet Spillout				
FTR4X4YL	Used to limit the bend radius of the cable to 2" (50.8mm) when exiting from a 4x4 or 6x4 FIBERRUNNER® Vertical Tee and 4x4 FIBER-DUCT™ Fittings.	4x4	1	5
2-Port Spillout to 1.5" (38mm) Inside Diameter Corrugated Tubing				
FIDT4X4BL	Used to route cable into one or two pieces of 1.5" (38mm) diameter split corrugated tubing. Used with FRVT6X4YL, FRVT4X4YL, or FVT4X4YL. Securely holds corrugated split tubing to ensure system integrity and easy access to add or remove cables. Black color only.	4x4	1	5

For other colors replace suffix YL (Yellow) with OR (Orange) or BL (Black).

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FIBER-DUCT™ Bend Radius Control Trumpets

- Provide method to transition cabling into rack system
- Maintain 1" (25.4mm) bend radius control



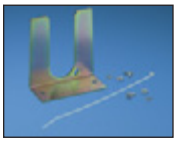
TRC2BL



TRC4BL

Part Number	Part Description	System Size	Std. Pkg. Qty.	Std. Ctn. Qty.
TRC2BL	Bend radius control trumpet for exiting at the sidewall of 2" wall heights of type E FIBER-DUCT™ Channels.	2x2	1	10
TRC4BL	Bend radius control trumpet for exiting at the sidewall of 4" wall heights of type E FIBER-DUCT™ Channels.	4x4	1	10

FIBER-DUCT™ Accessories



FITF4X4B



NR2
NR4



F14PWN-L



F14PN-L

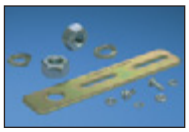
Part Number	Part Description	System Size	Std. Pkg. Qty.	Std. Ctn. Qty.
Innerduct Transition Fitting – 4x4 Size				
FITF4X4B	Provides transition from 4x4 FIBER-DUCT™ Routing System to two pieces of 1 1/4" (31.8mm) inner duct.	4x4	1	10
Snap Rivets				
NR2WH-L	Snap rivet fastens channel and fittings together for added strength and rigidity. Snap rivet mounts flush to surfaces.	2x2	50	500
NR4BL-L		4x4	50	500
Plastic Bolts and Nuts				
F14PWN-L	1/4" plastic bolts and wing nuts fastens channel and fittings together for added strength and rigidity.	2x2 4x4	50	500
F14PN-L	1/4" plastic bolts and hex nuts fastens channel and fittings together for added strength and rigidity.	2x2 4x4	50	500

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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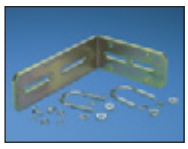
FIBER-DUCT™ Mounting Brackets



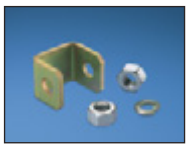
FTRBE12/FTRBE12M
FTRBE58



FTRBN12/FTRBN12M
FTRBN58



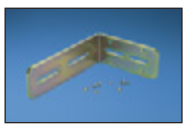
FUSB



FLB12X15
FLB58X15
FLB12X20
FLB58X20



FLRB



FLB



FZBA1.5X4



FZBLP

Part Number	Part Description	For Threaded Rod Size	Std. Pkg. Qty.	Std. Ctn. Qty.
Existing Threaded Rod Bracket for *FIBER-DUCT*™ System				
FTRBE12	Used for supporting the 2x2 and 4x4 *FIBER-DUCT*™ Systems from existing threaded rod installations. Bracket is secured to threaded rod with two split nuts. Contains hardware for attaching to threaded rods and hardware for mounting channel to bracket.	1/2"	1	10
FTRBE58		5/8"	1	10
FTRBE12M		12mm	1	10
New Threaded Rod Bracket for *FIBER-DUCT*™ System				
FTRBN12	Used for supporting the 2x2 and 4x4 *FIBER-DUCT*™ Systems from new threaded rod installations. Bracket is secured to threaded rod with two nuts. Contains hardware for attaching to threaded rods and hardware for mounting channel to bracket.	1/2"	1	10
FTRBN58		5/8"	1	10
FTRBN12M		12mm	1	10
Underfloor Pedestal for *FIBER-DUCT*™ System				
FUSB	Used to support the 2x2 and 4x4 *FIBER-DUCT*™ Systems by attaching to underfloor pedestal (not included). Use on pedestals up to 1" in diameter. Bracket contains hardware to attach to pedestal and hardware for mounting channel to bracket.	—	1	10
Bracket for Attaching Threaded Rod to 1 1/2" Ladder Rack				
FLB12X15	Bracket attaches to 3/8" (9.5mm) wide x 1 1/2" (38.1mm) ladder rack rail. Bracket accepts threaded rod (not included). Contains bracket and hardware for attaching bracket to ladder rack.	1/2"	1	10
FLB58X15		5/8"	1	10
Bracket for Attaching Threaded Rod to 2" Ladder Rack				
FLB12X20	Bracket attaches to 3/8" (9.5mm) wide x 2" (50.8mm) ladder rack rail. Bracket accepts threaded rod (not included). Contains bracket and hardware for attaching bracket to ladder rack.	1/2"	1	10
FLB58X20		5/8"	1	10
Ladder Rack Bracket for *FIBER-DUCT*™ System				
FLRB	Used to support the 2x2 and 4x4 *FIBER-DUCT*™ Systems attaching directly to any 3/8" (9.5mm) x 1 1/2" (38.1mm) or 3/8" (9.5mm) x 2" (50.8mm) ladder rack rail. No threaded rod required. Contains hardware for mounting channel to bracket.	—	1	10
"L" Wall Mount Bracket for *FIBER-DUCT*™ System				
FLB	Used to support 2x2 and 4x4 *FIBER-DUCT*™ Systems by attaching to a wall or the front or back of an equipment rack. Contains hardware for mounting channel to bracket.	—	1	10
Adjustable "Z" Bracket				
FZBA1.5X4	Bracket used to offset *FIBER-DUCT*™ System from mounting surface, adjustable from 1.5" (38mm) to 4" (101mm). Typically used on the front of an equipment rack.	—	1	10
Low Profile "Z" Bracket				
FZBLP	Bracket used to offset 4x4 or 2x2 *FIBER-DUCT*™ and hinged duct from the front face of an equipment rack. Bracket provides a secure mounting surface .67" (17mm) from the front of an equipment rack.	—	1	10

Table continued on page C3.58

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FIBER-DUCT™ Mounting Brackets (continued)



FEIAB58



F2PCLB12
F2PCLB58
F2PCLB12M
F2PCLB58M



FRAFC58

Part Number	Part Description	For Threaded Rod Size	Std. Pkg. Qty.	Std. Ctn. Qty.
EIA/TIA Threaded Rod Mounting Bracket				
FEIAB58	Bracket consists of two identical components that clamp onto the crossmembers of standard EIA/TIA racks and are secured with standard hex nuts and split lockwashers (included) tightened onto a length of 5/8" diameter threaded rod (not included). The threaded rod is positioned in the center of the brackets providing a vertical threaded rod stud to mount FIBERRUNNER® and FIBER-DUCT™ Threaded Rod Mounting Brackets onto.	5/8"	1	10
Two-Piece Ladder Rack Bracket for Attaching Threaded Rod to 1 1/2" – 2" Ladder Rack				
F2PCLB12	Two-piece bracket attaches to 3/8" (9.5mm) wide x 1 1/2" (38.1mm) or 3/8" (9.5mm) wide x 2" (50.8mm) ladder rack rail. Bracket halves slide into position and clamp together on the ladder rack rail, which allows for a one-handed assembly of the threaded rod (not included). Contains bracket and hardware for attaching bracket to ladder rack.	1/2"	1	10
F2PCLB58		5/8"	1	10
F2PCLB12M		12mm	1	10
F2PCLB58M		16mm	1	10
Two-Piece Framing Clip for Attaching 5/8" Threaded Rod to 2" x 9/16" C-Channel Auxiliary Framing Bars				
FRAFC58	Two-piece framing clip attaches to auxiliary framing bars. Framing clip halves slide into position and interlock on the auxiliary framing bars, allowing easier assembly of the threaded rod to bars. Contains two-piece framing clip and hardware for attaching framing clip to auxiliary framing bars. (5/8" threaded rod not included.)	5/8"	1	10

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CABINETS, RACKS, AND CABLE MANAGEMENT SOLUTIONS

PANDUIT provides leading edge cabinets, racks, and cable management solutions for telecommunications equipment rooms, data centers, and premise wiring applications. As the demand for system performance increases, it becomes essential to protect and manage cables to maintain system reliability and scalability. *PANDUIT* continues to provide innovative products that create end-to-end solutions for managing, protecting, and showcasing your network for the lowest cost of ownership.



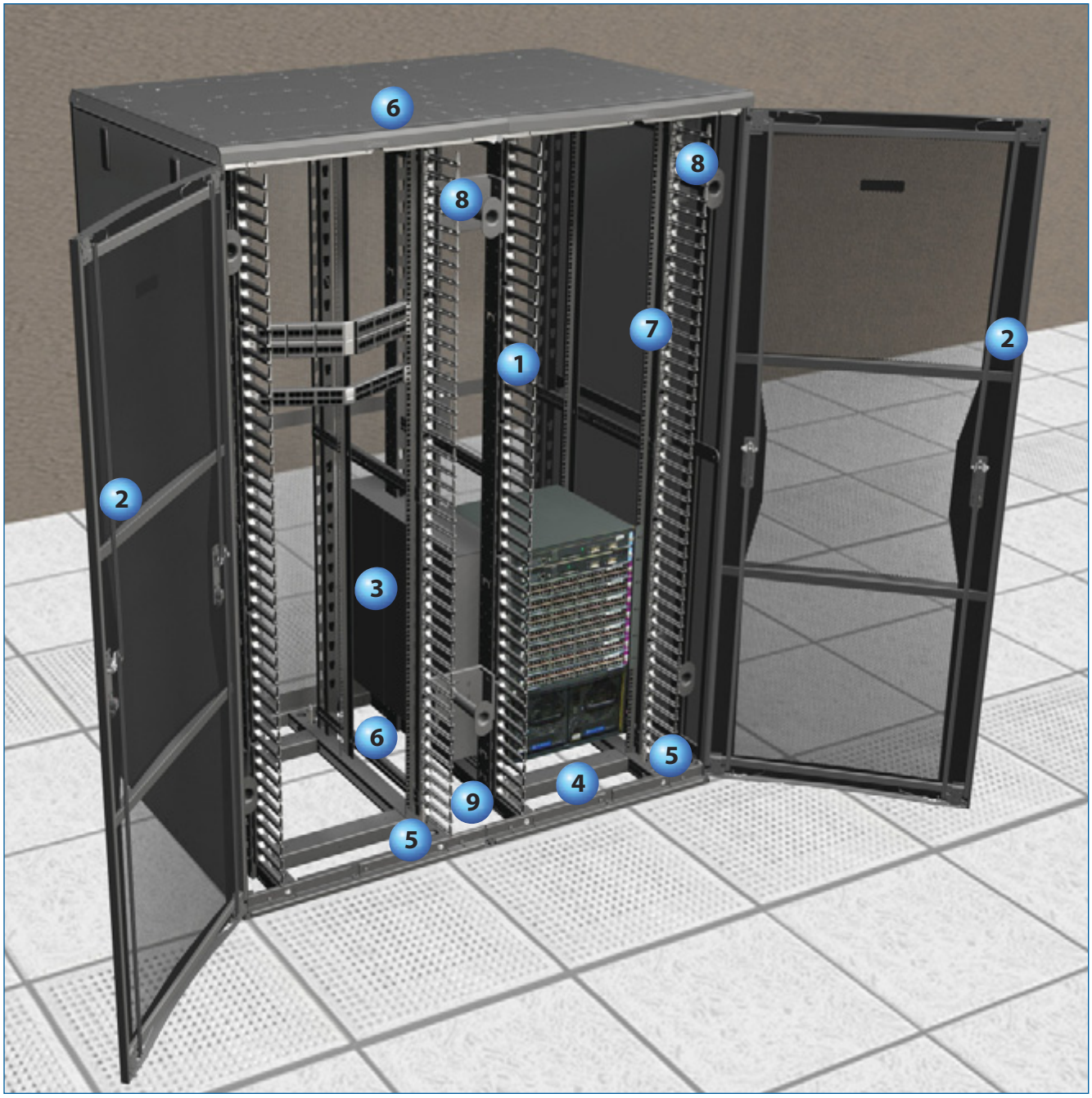
- New *PANDUIT*® *NET-ACCESS*™ Cabinet manages, protects, and showcases networks by combining the aesthetics and security of a cabinet with the accessibility of an open rack
- *PANDUIT* rack systems allow complete flexibility for a wide range of cable and equipment combinations and are designed to maximize cable access
- Vertical cable managers allow increased cable density for maximum space utilization and organization
- New *PANDUIT*® *NETMANAGER*™ High Capacity Horizontal Cable Managers for high performance cabling applications
- Modular design compatible with all *PAN-NET*® products to provide a flexible and aesthetically pleasing solution

PANDUIT provides all of the options necessary to support the most demanding copper and fiber installations while providing the flexibility to facilitate system upgrades now and in the future.

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NET-ACCESS™ Cabinet System Roadmap

- Manages, protects, and showcases your network by combining the aesthetics and security of a cabinet with the accessibility of an open rack



CISCO Compatible

NET-ACCESS™ Cabinet has tested compatible with Cisco MDS 9513 and Catalyst 6509.
Go to www.panduit.com/cisco1 for disclaimer.

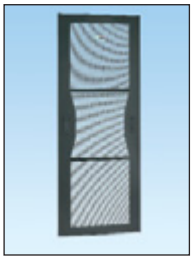
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NET-ACCESS™ Cabinet System Roadmap (continued)

1 Cable Management –
Vertical cable pathway design is optimized to provide unobstructed access; cable management finger sections can be located where needed on all four posts and align with rack spaces to ensure proper bend radius control



2 Dual Hinged Door –
Door can be opened 180° to left or right enabling unobstructed access to adjacent cabinets and pathways



3 Thermal Management –
Inset frame posts and cable management ensure clear pathways to provide proper heat dissipation; optional air ducts provide exhaust channels for high heat density applications



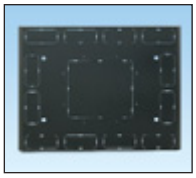
4 Grounding and Bonding –
Entire cabinet is fully electrically bonded including equipment rails, doors, and side panels; when combined with STRUCTUREDGROUND™ Grounding System, promotes protection of equipment and personnel, see pages C5.1 – C5.48



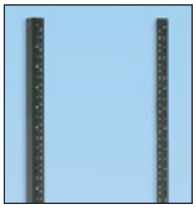
5 Easily Accessible Casters and Leveling Legs –
Leveling legs can be safely and easily adjusted and can retract into the cabinet frame. Optional casters mount to side of posts for safe, easy field installation



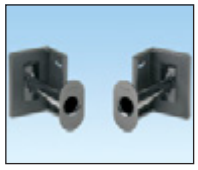
6 Routing Options for Overhead and Underfloor Cabling –
Knockouts in the top allow multiple options for overhead cable routing; large bottom openings provide pathways for routing cables from underfloor



7 Adjustable Equipment Rails –
Front and rear rails are fully adjustable to accommodate a variety of equipment and have printed rack space identification



8 Optional Slack Spools –
Slack management spools organize and manage patch cord slack. Spools are available in side mount for single cabinet or center mount for ganged application



9 Raised Floor Grommet –
The raised floor grommet reduces bypass airflow and prevents debris from falling below the raised floor. Grommets are available in different sizes for a variety of applications



Cable Capacity Chart

Channel	No Slack Spool							With Slack Spool					
	Channel Area		Cable Capacity*					Channel Area		Cable Capacity*			
	In.²	cm²	Cat. 6A (.354")	Cat. 6A (.310")	Cat. 6 (.250")	Cat. 5e (.187")	Fiber (3mm)	In.²	cm²	Cat. 6A (.354")	Cat. 6 (.250")	Cat. 5e (.187")	Fiber (3mm)
End	42.0	271.0	170	222	342	611	1,533	32.4	209.0	131	264	471	1,182
Center (ganged)	84.0	542.0	341	445	684	1,223	3,066	74.4	480.0	302	606	1,083	2,716

*Note: Capacities are based upon a fill rate of 40% to accommodate proper cable routing applications.

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NET-ACCESS™ Cabinet – Designed Specifically for Network Switching and Patching Applications



The new *PANDUIT*® NET-ACCESS™ Cabinet combines the aesthetics and security of a cabinet with the accessibility of an open rack, provides superior accessibility to the cable pathways, improves thermal management by controlling airflow to network equipment and is fully electrically bonded to facilitate proper grounding. The NET-ACCESS™ Cabinet has achieved Cisco Compatible status, passing rigorous testing and meeting guidelines of the Cisco Technology Developer Program.

Cable Management

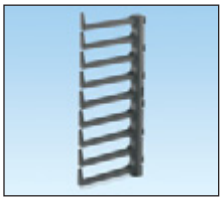
The NET-ACCESS™ Cabinet incorporates inset frame posts, creating large and accessible vertical pathways for routing cables.



Also featured is an innovative dual-hinged door which provides unobstructed access to network cables and equipment.

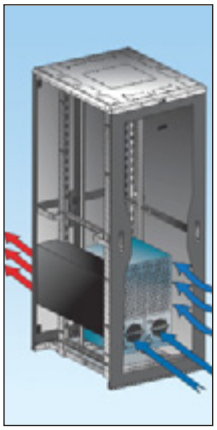


Modular cable management finger sections mount easily to the front or back of all four cabinet posts.



Thermal Management

The NET-ACCESS™ Cabinet optimizes the thermal performance of network switches requiring side-to-side airflow.



This cabinet ensures the industry recommended 6" clearance between equipment and cabinet walls by properly routing cables away from ventilation pathways.

Integrated Grounding System

The NET-ACCESS™ Cabinet features a fully integrated, electrically bonded structure to maximize uptime, maintain system performance, and protect network equipment and personnel.



Built-in grounding features include all welded construction, special bonded rail mounting, conductive door hinges and a unique side panel mounting system.

Because *PANDUIT* has revolutionized the network cabinet by addressing the issues of cable management, thermal management and grounding, network designers are no longer left to choose between the security and aesthetics of a cabinet or the accessibility and cable management of an open rack.

Cisco Compatible

NET-ACCESS™ Cabinet has tested compatible with Cisco MDS 9513 and Catalyst 6509.
Go to www.panduit.com/cisco1 for disclaimer.

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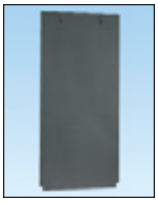
NEW! NET-ACCESS™ Cabinets

- Inset frame posts creating large and accessible vertical pathways for routing cables
- Modular cable management fingers easily mount to the front and/or back of all four cabinet posts
- Designed with the use of CFD (Computational Fluid Dynamics) analysis and thermal lab testing to optimize the thermal performance of network switches requiring side-to-side airflow
- Accommodate equipment mounting depths up to 25.9" (658mm)
- Innovative, fully integrated, electrically bonded cabinet with a single ground connection to guard against EMI and ESD, and provide a safe current path to ground
- Four adjustable equipment mounting rails – available in cage nut or #12-24 threaded with printed rack space identification
- Durable black polyester epoxy powder coat finish
- 2,500 lbs. (1134 kg) load rating
- Cabinet ships assembled, one per pallet
- For the complete grounding solution, see the STRUCTUREDGROUND™ Kits for Cabinets selection guide on pages C5.10 – C5.11


CN1


CN2


CN4

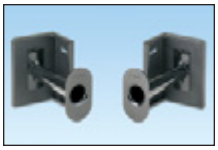

CNPS

Part Number	Part Description	Std. Pkg. Qty.
NET-ACCESS™ Cabinets		
CN1	Cabinet frame with top panel. Dual hinge perforated front door opens to the left or right. Split perforated rear doors open in the middle to minimize door swing footprint. Solid side panels. Two sets of #12-24 threaded equipment mounting rails. 45 RU cable management on front and rear of front posts. Dimensions: 84.0"H x 31.5"W x 41.0"D (2134mm x 800mm x 1044mm)	1
CN2	Cabinet frame with top panel. Dual hinge perforated front door opens to the left or right. Split perforated rear doors open in the middle to minimize door swing footprint. Two sets of #12-24 threaded equipment mounting rails. 45 RU cable management on front and rear of front posts. Dimensions: 84.0"H x 31.5"W x 41.0"D (2134mm x 800mm x 1044mm)	1
CN4	Cabinet frame with top panel. Split perforated front and rear doors open in the middle to minimize door swing footprint. Solid side panels. Set of two #12-24 threaded equipment mounting rails. 45 RU cable management on front and rear of front posts. Dimensions: 84.0"H x 31.5"W x 40.0"D (2134mm x 800mm x 1017mm)	1
NET-ACCESS™ Cabinet Options and Accessories		
CNPS	Removable solid side panel with lockable push button latches.	1
CNBRFK	Network cabinet cable management finger kit, nine RU sections. Kit includes five left and five right finger sections to complete 45 RU on one side of post. Cable capacity of each RU is 48 Category 6 cables or 24 Category 6A cables.	1
CNAE1	Network cabinet air exhaust duct for high heat density configurations. Designed for Cisco^ 6509 switch.	1
CNAE2	Network cabinet air exhaust duct for high heat density configurations. Designed for Cisco^ 9513 switch.	1
CNSPE	Network cabinet end channel slack spools. Package includes one left and one right slack spool and mounting brackets.	1
CNSPC	Network cabinet center channel slack spool. Package includes one center spool and mounting bracket.	1
CNCSTR	Network cabinet casters – set of four. Can be field installed without tipping cabinet.	1

For information about NET-ACCESS™ Server Cabinets, consult www.panduit.com.
^Cisco is a registered trademark of Cisco Technology, Inc.


CNBRFK


CNAE1


CNSPE

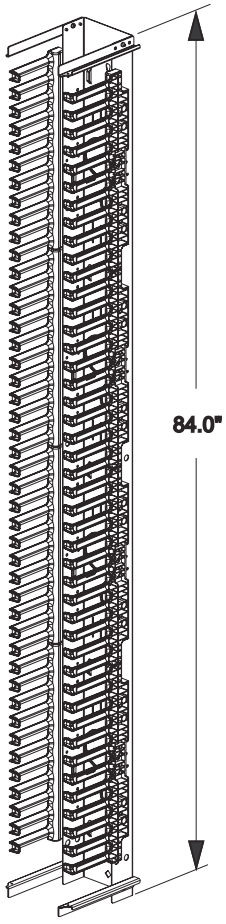

CNSPC


CNCSTR

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PATCHRUNNER™ Vertical Cable Management Rack System Roadmap





PRVF8

Cable Capacity Chart

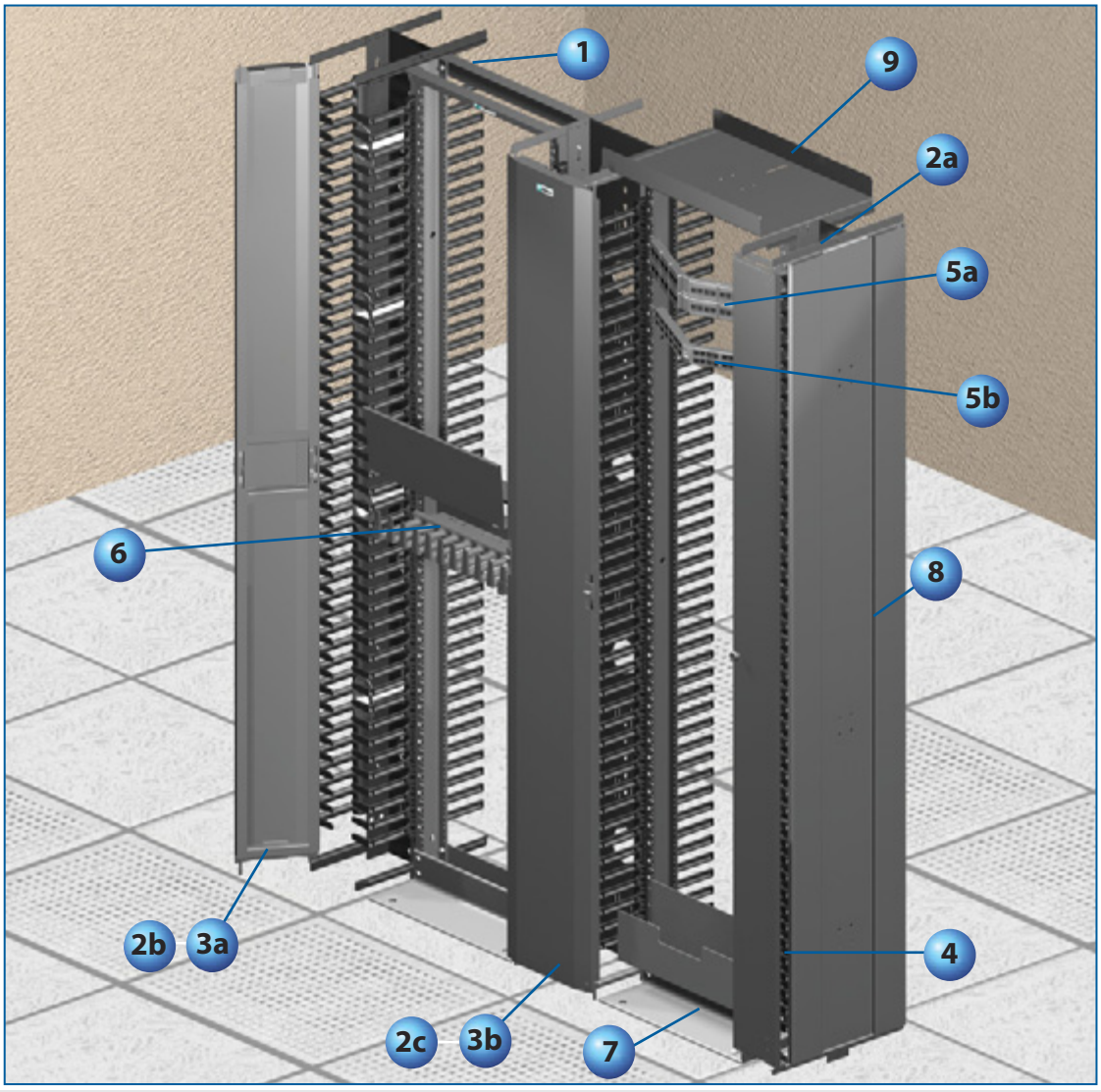
	Front Channel with Spool				Front Channel No Spool				Rear Channel			
	Channel Area (In.²)	Cable Capacity			Channel Area (In.²)	Cable Capacity			Channel Area (In.²)	Cable Capacity		
		Cat. 6A (.354")	Cat. 6 (.250")	Cat. 5e (.17")		Cat. 6A (.354")	Cat. 6 (.250")	Cat. 5e (.187")		Cat. 6A (.354")	Cat. 6 (.250")	Cat. 5e (.187")
PRV6 (front/rear)	28.2	—	—	—	37.8	134	269	481	27.6	98	196	351
PRVF6 (front only)	28.2	—	—	—	37.8	134	269	481	—	—	—	—
PRV8 (front/rear)	44.7	158	318	569	54.3	193	387	691	39.0	138	277	496
PRVF8 (front only)	44.7	158	318	569	54.3	193	387	691	—	—	—	—
PRV10 (front/rear)	61.1	217	435	779	70.7	251	504	901	50.3	179	358	641
PRVF10 (front only)	61.1	217	435	779	70.7	251	504	901	—	—	—	—
PRV12 (front/rear)	77.6	275	553	988	87.2	310	621	1111	61.7	219	439	786
PRVF12 (front only)	77.6	275	553	988	87.2	310	621	1111	—	—	—	—

Note: Capacities are based upon a fill rate of 35% to accommodate proper cable routing techniques.

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PATCHRUNNER™ Vertical Cable Management Rack System Roadmap

- Vertical cable management system that can manage high density network equipment and patch panels in up to half the number of racks required by traditional horizontal and vertical cable management systems



1 CMR19X84 – 19" Standard EIA Rack 19" x 7', 45 RU (page C4.15)

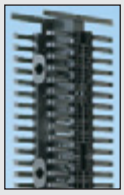


PATCHRUNNER™ VERTICAL MANAGERS

2a PRV6 – 6" wide (page C4.8)

2b PRV8 – 8" wide (page C4.8)

2c PRV12 – 12" wide (page C4.8)

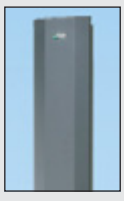


HINGED DOORS

3a PRD8 – Dual Hinge, 8" wide (page C4.8)

3b PRD12 – Dual Hinge, 12" wide (page C4.8)

4 PRSHD6 – Single Hinge, 6" wide (shown) (page C4.8)



ANGLED MODULAR PATCH PANELS

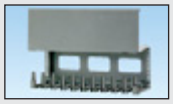
5a CPPLA48WBLY – 2 RU, 48-Port (page C1.11)



5b CPPA48HDWBLY – 1 RU, High Density 48-Port (page C1.10)



6 NCMHAEF4 – Cable Pathway 4 RU (page C4.22)



7 CMT4 – Trough, 4 RU (page C4.24)



8 PREP – End Panel (page C4.9)



9 CRTW – Rack Top Trough (page C4.9)



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PATCHRUNNER™ Vertical Cable Management System

- High density minimizes area required for network layout, freeing up valuable floor space
- Curved cable management fingers support cables as they transition to the vertical pathway eliminating the need for horizontal managers
- Individual fingers can be removed without the use of a tool for routing of large cable bundles
- Fingers align with rack spaces simplifying cable routing
- Slack management spools organize and manage patch cord slack allowing standardization of patch cords
- Optional hinged doors provide easy access to vertical pathway; purchased separately from manager
- Angled patch panels promote proper bend radius control



PRV8



PRVF8



PRD8



PRSHD8

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
Vertical Managers – Manages Cable on Front and Rear of Rack				
PRV12	Vertical cable manager, includes four PRSP7 slack spools. Dimensions: 83.9"H x 12.0"W x 16.4"D (2131mm x 305mm x 417mm)	45	1	—
PRV10	Vertical cable manager, includes four PRSP7 slack spools. Dimensions: 83.9"H x 10.0"W x 16.4"D (2131mm x 253mm x 417mm)	45	1	—
PRV8	Vertical cable manager, includes four PRSP7 slack spools. Dimensions: 83.9"H x 8.0"W x 16.4"D (2131mm x 203mm x 417mm)	45	1	—
PRV6	Vertical cable manager, spools are not included. Dimensions: 83.9"H x 6.0"W x 16.4"D (2131mm x 152mm x 417mm)	45	1	—
Vertical Managers – Manages Cable on Front of Rack Only				
PRVF12	Vertical cable manager, includes four PRSP7 slack spools. Dimensions: 83.9"H x 12.0"W x 9.7"D (2131mm x 305mm x 246mm)	45	1	—
PRVF10	Vertical cable manager, includes four PRSP7 slack spools. Dimensions: 83.9"H x 10.0"W x 9.7"D (2131mm x 253mm x 246mm)	45	1	—
PRVF8	Vertical cable manager, includes four PRSP7 slack spools. Dimensions: 83.9"H x 8.0"W x 9.7"D (2131mm x 203mm x 246mm)	45	1	—
PRVF6	Vertical cable manager, spools are not included. Dimensions: 83.9"H x 6.0"W x 9.7"D (2131mm x 152mm x 246mm)	45	1	—
Doors				
PRD12	Dual hinged metal door. Dimensions: 82.8"H x 12.1"W x 1.6"D (2104mm x 308mm x 40mm)	45	1	—
PRD10	Dual hinged metal door. Dimensions: 82.8"H x 10.1"W x 1.6"D (2104mm x 257mm x 40mm)	45	1	—
PRD8	Dual hinged metal door. Dimensions: 82.8"H x 8.1"W x 1.6"D (2104mm x 206mm x 40mm)	45	1	—
PRD6	Dual hinged metal door. Dimensions: 82.8"H x 6.1"W x 1.6"D (2104mm x 155mm x 40mm)	45	1	—
PRSHD12	Single hinged metal door. Dimensions: 80.7"H x 12.0"W x .8"D (2049mm x 305mm x 20mm)	45	1	—
PRSHD8	Single hinged metal door. Dimensions: 80.7"H x 8.0"W x .8"D (2049mm x 203mm x 20mm)	45	1	—
PRSHD6	Single hinged metal door. Dimensions: 80.7"H x 6.0"W x .8"D (2049mm x 152mm x 20mm)	45	1	—

^One rack space = 1.75" (44.45mm).
All product color is black.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PATCHRUNNER™ Vertical Cable Management System (continued)



PREP



PRSP7



CRTW

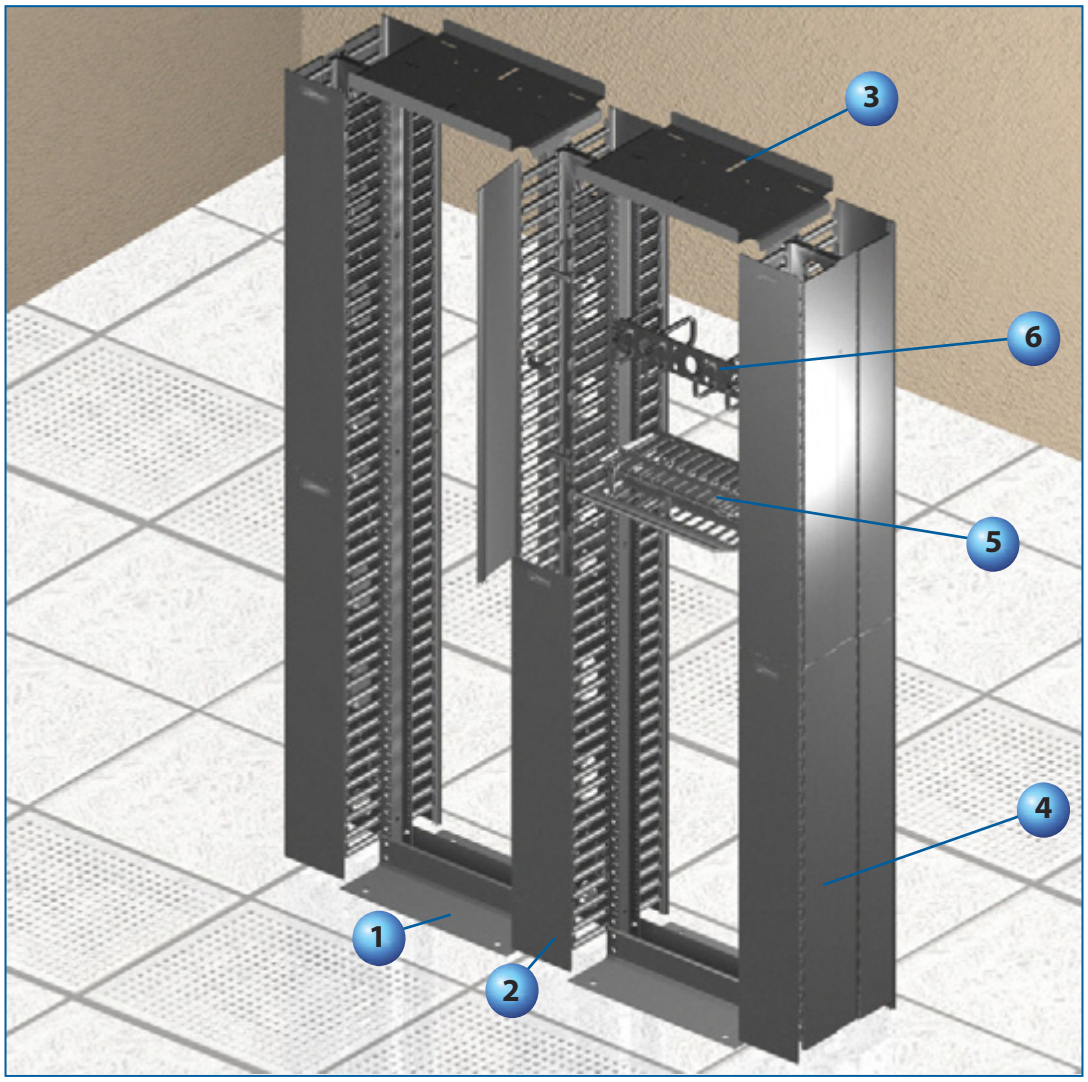
Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
Accessories				
PRSP7	Molded plastic slack spool, front only. Dimensions: 7.0"D x 1.3" dia. (178mm x 32mm)	—	1	10
PRSP5	Molded plastic slack spool, front only. Dimensions: 5.25"D x 1.3" dia. (133mm x 32mm)	—	1	10
PREP	End panel. Dimensions: 82.5"H x 14.5"W x .7"D (2095mm x 367mm x 18mm)	—	1	—
CRTW	Rack top trough with waterfall creates pathway above rack, for use with CMR19X84, PRV6, PRV8, PRV10 and PRV12. Dimensions: 3.3"H x 23.4"W x 14.0"D (84mm x 594mm x 356mm)	—	1	—

^One rack space = 1.75" (44.45mm).
All product color is black.

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NETRUNNER™ Vertical Cable Management Rack System Roadmap

- Vertical cable managers designed for use on EIA standard, 3" channel racks. Used with horizontal cable managers to support low to mid density patch panel applications.



1 **CMR19X84 – 19" Standard EIA Rack, 19" x 7', 45 RU (page C4.15)**



2 **WMPVHC45E (shown) – 6" Wide Front and Rear Vertical Manager – 45 RU**

WMPV45E – 4" Wide Front and Rear Vertical Manager – 45 RU (page C4.11)



3 **WMPV45ERTW – Rack Top Trough with Waterfall creates pathway above rack, for use with CMR19X84 and WMPV45E and WMPVHC45E (page C4.11)**



4 **WMPVHC45EP (shown) – End Panel for WMPVHC45E**

WMPV45EP – End Panel for WMPV45E (page C4.11)



5 **WMPH2E – 2 RU PATCHLINK™ Horizontal Cable Manager**
Front pathway 3"H x 3"D
Rear pathway 2"H x 5"D
Width 20.2" (page C4.20)



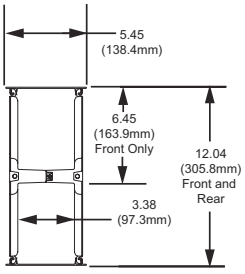
6 **CMPH2 – 2 RU OPEN-ACCESS™ Horizontal Cable Manager D-rings installed on panels Front D-ring size 3"H x 3"D**
Rear D-ring size 3"H x 5"D
Width 19" (page C4.23)



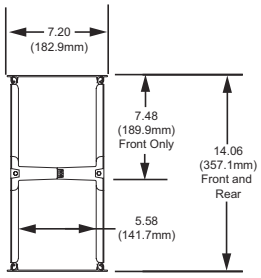
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NETRUNNER™ Vertical Cable Management

- Large finger openings accommodate up to 24 Category 6 cables
- Integral cable retainers on the end of each finger to help contain cables within each rack unit
- Bend radius fingers align with rack spaces to support cables as they transition to the vertical pathway
- Dual hinged covers can be opened 110° to the left or right to provide complete access to the cables inside the vertical pathway
- Snap-on cable retainers can be placed on to fingers to help retain cables in channel during installation and maintenance
- Vertical managers include hinged covers, cable retainers, mounting brackets and #12-24 screws



WMPV45E/WMPV22E



WMPVHC45E

Cable Capacity Chart

Part Number	Category 6A (.354")		Category 6 (.250")		Category 5e (.187")	
	Front	Rear	Front	Rear	Front	Rear
WMPV22E	65	65	131	131	235	235
WMPVF22E	65	—	131	—	235	—
WMPV45E	65	65	131	131	235	235
WMPVF45E	65	—	131	—	235	—
WMPVHC45E	122	122	245	245	439	439
WMPVHCF45E	122	—	245	—	439	—

Note: Capacities are based upon a fill rate of 35% to accommodate proper cable routing techniques.



WMPV45E WMPVF45E

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
Vertical Cable Managers – Front and Rear				
WMPV22E	Front and rear vertical manager.	22	1	—
WMPVHC45E	Front and rear vertical manager. Dimensions: 80.4"H x 6.7"W x 13.8"D (2042.2mm x 170.2mm x 350.2mm) Includes hinged covers, wire retainers, and side mount brackets.	45	1	—
WMPV45E	Front and rear vertical manager.	45	1	—
Vertical Cable Managers – Front Only				
WMPVF22E	Front only vertical manager.	22	1	—
WMPVHCF45E	Front only vertical manager.	45	1	—
WMPVF45E	Front only vertical manager.	45	1	—
Accessories				
WMPVCBE	NETRUNNER™ Center Mount Bracket Kit allows mounting to adjacent racks.	—	1	10
WMPVSMK	NETRUNNER™ Side Mount Hardware Kit for use with *PANDUIT* DR84, NFR84, CMR4P84, CMR4P84CN, and CMR19X85S racks.	—	1	10
WMPVCMB	Rack adapter bracket kit. Front or back mounted on racks with dimensions up to 1 5/8" (41.1mm) from outside edge of rack to center of the mounting hole. Two kits are required for center mounting of NETRUNNER™ Managers.	—	1	10
WMPVHC45EP	End panel for use with WMPVHC45E. Includes two panel sections to cover 45 RU on one side.	—	1	—
WMPV45EP	End panel for use with WMPV45E. Includes two panel sections to cover 45 RU on one side.	—	1	—
WMPV45ERTW	Rack top trough with waterfall creates pathway above rack, for use with CMR19X84 and WMPV45E/WMPVHC45E.	—	1	—

^One rack space = 1.75" (44.45mm).
All product color is black.

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NEW! Raised Floor Grommet

- Air tight fabric minimizes bypass of air through cutouts in the raised floor to decrease energy costs in hot aisle/cold aisle data center designs
- Cinch tie closes top of fabric to prevent air from escaping around cable bundles
- Electrostatic dissipation material provides a pathway to ground reducing the chance of damaging network equipment with electric shock
- Vertical *TAK-TY®* Hook & Loop Cable Tie closure system allows for installation on existing cable bundles
- Horizontal *TAK-TY®* Hook & Loop Cable Tie closure system allows two or more bundles to be separated in existing or new installations
- Flexible outer ring houses fabric to allow user to secure product to raised floor tile; slit allows ring to rotate 90° so entire cable bundle can be inserted to allow for retrofit installations even when vertical cable managers are already in place
- Integral products include a flexible sub-grommet to prevent damage to cable from sharp edges of cut floor tile
- Screws allow a secure fastening method to top of raised floor tile that also provides a pathway to ground
- Manufactured from flame retardant material

PATENT PENDING



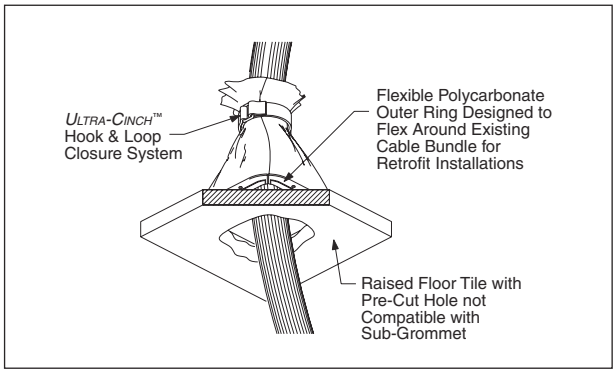
RFG*X*SM



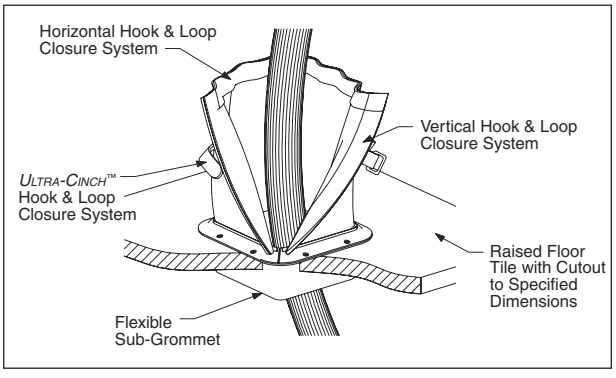
RFG*X*

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
Surface Mount			
RFG6X8SM	Overall size of 6" x 8" allows for 4.2" x 6.2" capacity.	1	1
RFG8X8SM	Overall size of 8" x 8" allows for 6.2" x 6.2" capacity.	1	1
RFG10X8SM	Overall size of 10" x 8" allows for 8.2" x 6.2" capacity.	1	1
RFG12X4SM	Overall size of 12" x 4" allows for 10.2" x 2.2" capacity.	1	1
RFG12X8SM	Overall size of 12" x 8" allows for 10.2" x 6.2" capacity.	1	1
RFG3DSM	Overall size of 4.8" diameter allows for 3" diameter capacity.	1	1
RFG5DSM	Overall size of 6.8" diameter allows for 5" diameter capacity.	1	1
Integral Mount			
RFG6X8	Overall size of 6" x 8" allows for 4.2" x 6.2" capacity.	1	1
RFG8X8	Overall size of 8" x 8" allows for 6.2" x 6.2" capacity.	1	1
RFG10X8	Overall size of 10" x 8" allows for 8.2" x 6.2" capacity.	1	1
RFG12X4	Overall size of 12" x 4" allows for 10.2" x 2.2" capacity.	1	1
RFG12X8	Overall size of 12" x 8" allows for 10.2" x 6.2" capacity.	1	1
RFG3D	Overall size of 4.8" diameter allows for 3" diameter capacity.	1	1
RFG5D	Overall size of 6.8" diameter allows for 5" diameter capacity.	1	1

Product complies with Article 645 Section 5(D)(4) of the 2005 National Electrical Code.
Compatible with *NETRUNNER™* and *PATCHRUNNER™* Cable Managers, and *PANDUIT* cabinets to create a complete cable management system.



Surface Mount Application

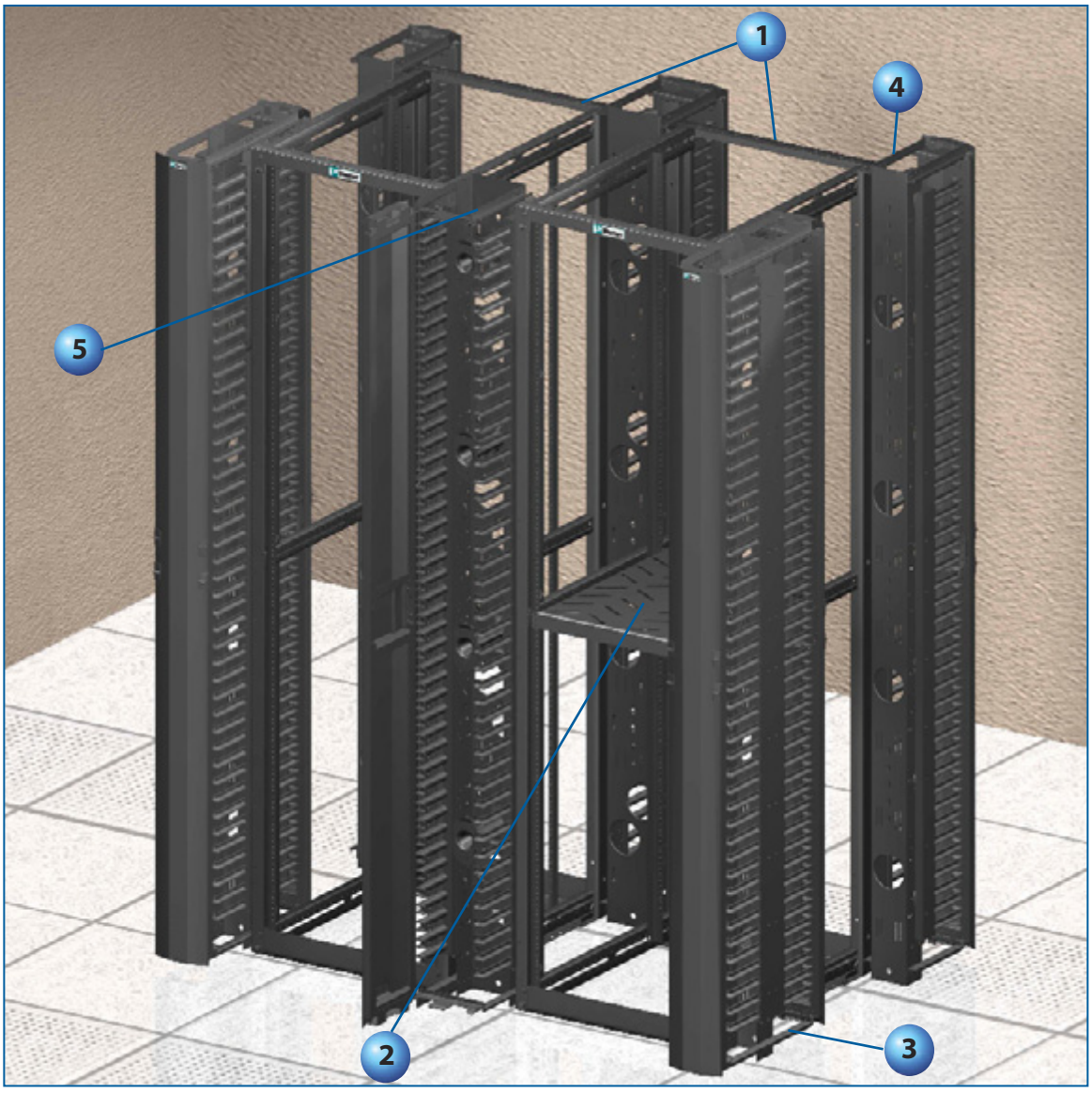


Integral Mount Application

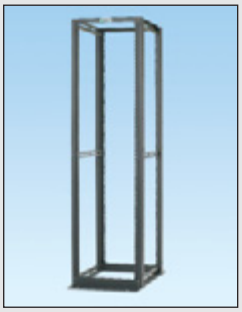
Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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4 Post Rack System Roadmap

- Supports deep networking equipment; the rack combines the stability of a cabinet with the accessibility of an open rack to provide maximum flexibility



1 **CMR4P84 – 4 Post Rack 19"x7', 45 RU (page C4.14)**



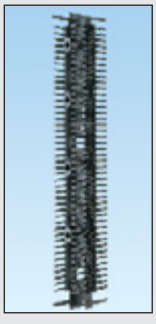
2 **NF4PSHLF19X23 – 4 Post Rack Shelf 19"W x 23"D (page C4.14)**



3 **PRV6 – Vertical Cable Manager 6" Wide (page C4.8)**

4 **PRVF6 – Vertical Cable Manager 6" Wide (page C4.8)**

5 **PRVF8 – Vertical Cable Manager 8" Wide (page C4.8)**



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4 Post Cable Management Rack System and Accessories

- Independent adjustable front and rear mounting rails can be adjusted while the rack is secured to the floor
- Printed rack space identification on all equipment rails allows for quick location of rack spaces, speeding installation of rack mount items
- Rack is UL listed for 2,000 lbs. load rating
- Rear rail construction provides a clear ventilation path for side ventilated switches
- Multiple mounting holes in top flanges for securing ladder rack
- Weld nut construction eliminates the need for a second wrench increasing speed and ease of assembly
- Multiple mounting locations for vertical power strips on any of the four posts or on the adjustable mounting rails
- *PatchRunner*™ and *NetRunner*™ Vertical Cable Managers mount directly to the 4 post rack at any of the four corners to provide a flexible end-to-end cable management solution
- Paint piercing washers included to electrically bond rack for simplified grounding
- For the complete grounding solution, see the *StructuredGround*™ Kits for Racks selection guide on pages C5.12 – C5.13



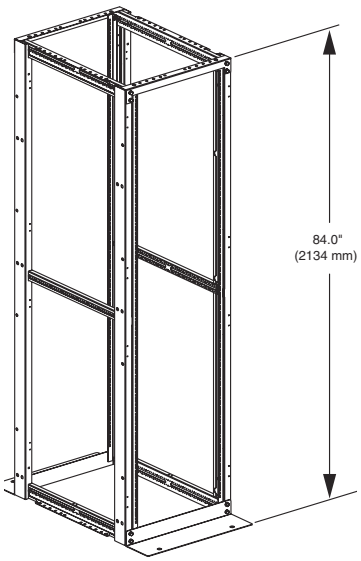
CMR4P84
CMR4P84CN

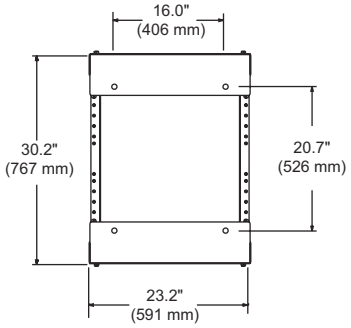


CMR4PWF

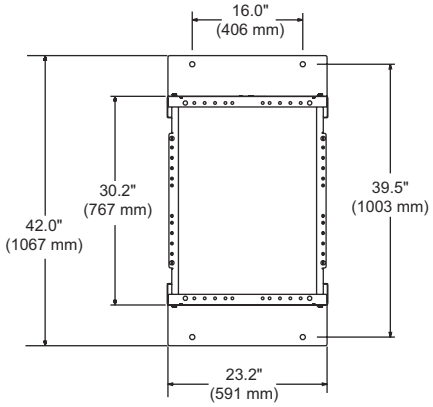
Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
4 Post Rack				
CMR4P84	4 post EIA rack with #12-24 threaded rails. Dimensions: 84.0"H x 23.3"W x 30.2"D (2134mm x 591mm x 767mm)	45	1	—
CMR4P84CN	4 post EIA rack with cage nuts. Includes 25 #12-24 cage nuts. Dimensions: 84.0"H x 23.3"W x 30.2"D (2134mm x 591mm x 767mm)	45	1	—
CMR4P96	4 post EIA rack with #12-24 threaded rails. Dimensions: 96.1"H x 23.3"W x 30.2"D (2441mm x 591mm x 767mm)	52	1	—
CMR4P96CN	4 post EIA rack with cage nuts. Includes 25 #12-24 cage nuts. Dimensions: 96.1"H x 23.3"W x 30.2"D (2441mm x 591mm x 767mm)	52	1	—
4 Post Rack Accessories				
CMR4PWF	Optional top trough with waterfall creates pathway above rack. Dimensions: 1.9"H x 26.1"W x 8.5"D (50mm x 662mm x 216mm)	—	1	—
CNWS1224-C	#12-24 cage nut and screws.	—	100	1000
NF4PSHLF19	4 post rack mount shelf, 250 lbs. load rating. Dimensions: 1.7"H x 19.0"W x 32.0"D (44mm x 483mm x 816mm)	1	1	—
NF4PSHLF19X23	4 post rack mount shelf, 250 lbs. load rating. Dimensions: 1.7"H x 19.0"W x 23.0"D (44mm x 483mm x 587mm)	1	1	—

^One rack space = 1.75" (44.45mm).
All product color is black.





Floor Footprint with Base Angles Turned Inward



Floor Footprint with Base Angles Turned Outward for Extended Footprint

CMR4P84 and CMR4P84CN Rack Footprint

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Standard Racks

- Rack space identification allows quick and easy location of rack mount items
- UL listed for 1,000 lbs. load rating
- Double-sided #12-24 EIA universal mounting hole spacing
- 24 #12-24 mounting screws included
- Can be used with all *PANDUIT* cable management and patch panel products in addition to any industry standard 19" components
- Paint piercing washers included to electrically bond rack for simplified grounding
- For the complete grounding solution, see the *STRUCTUREDGROUND*™ Kits for Racks selection guide on pages C5.12 – C5.13



CMR19X47

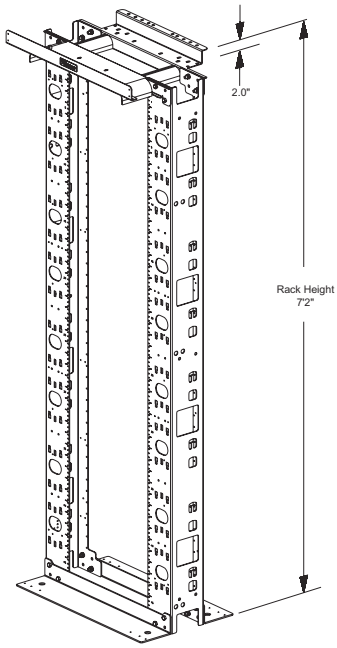
Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
CMR19X96	19" EIA rack, aluminum. Dimensions: 96.1"H x 20.3"W x 3.0"D (2441mm x 514mm x 76mm).	52	1	—
CMR19X84	19" EIA rack, aluminum. Dimensions: 84.0"H x 20.3"W x 3.0"D (2134mm x 514mm x 76mm).	45	1	—
CMR19X47	19" EIA rack, aluminum. Dimensions: 48.0"H x 20.3"W x 3.0"D (1219mm x 514mm x 76mm).	24	1	—
S1224-C	#12-24 x .5" mounting screws.	—	100	1000

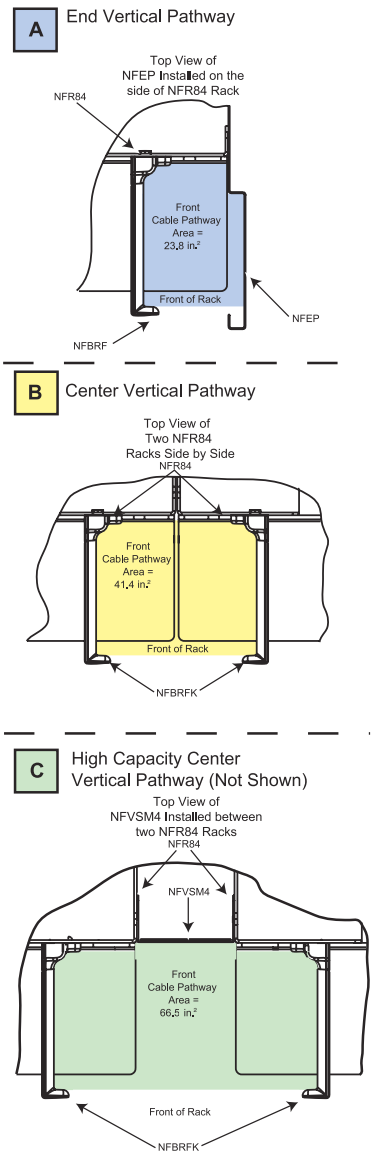
^One rack space = 1.75" (44.45mm).
All product color is black.

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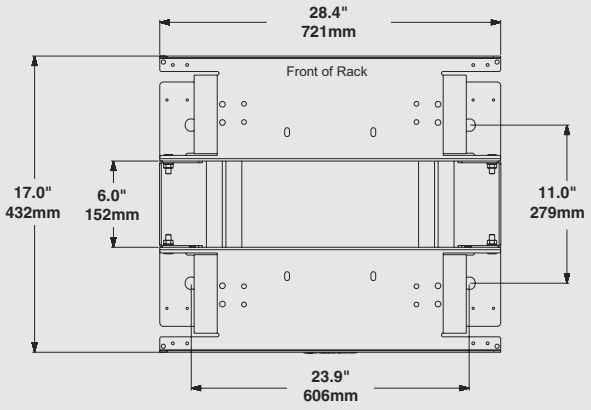
NETFRAME® Rack System Roadmap







Footprint for NETFRAME® Rack



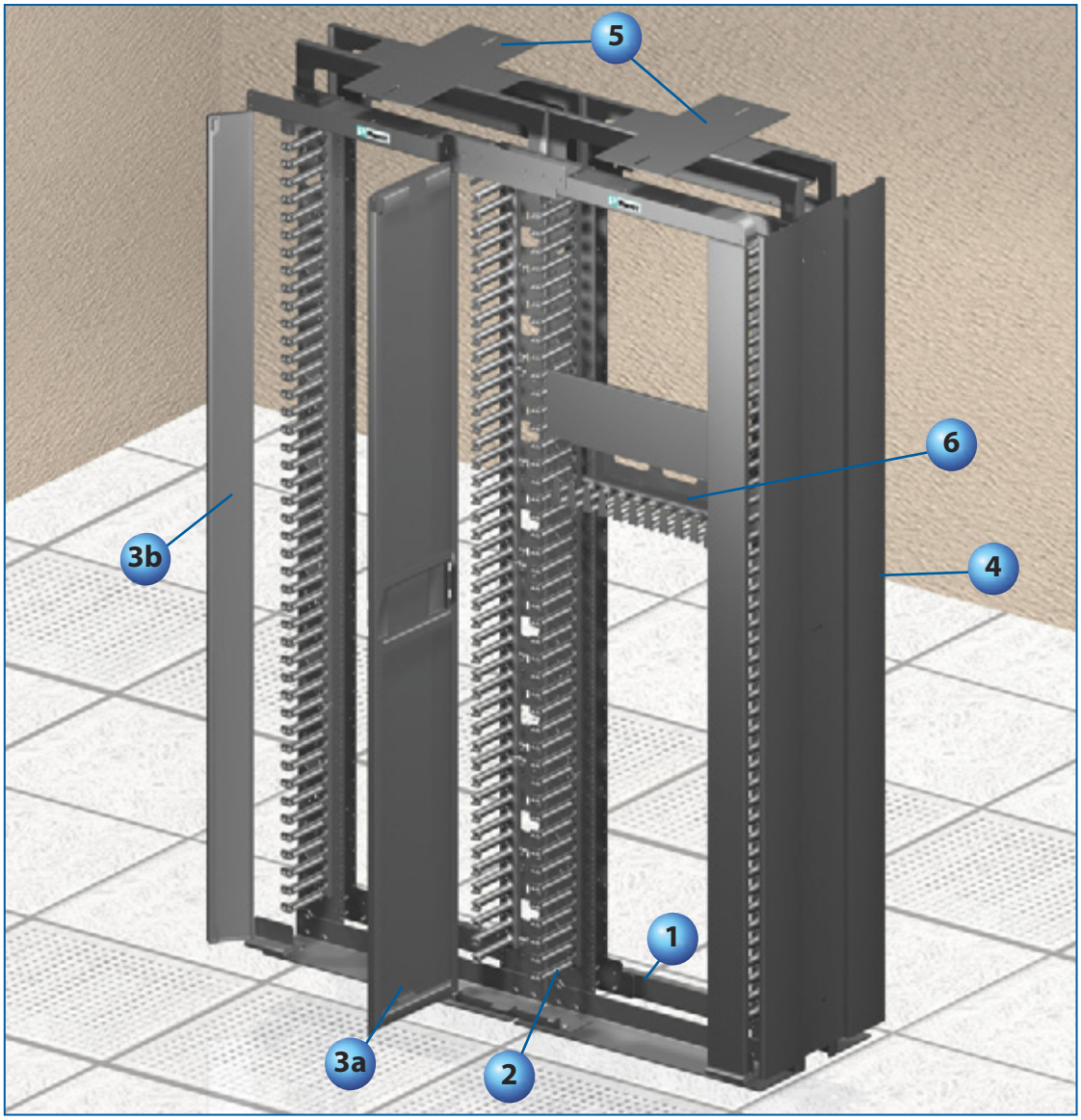
Pathway	Part Number	Front Channel			
		Channel Area (In²)	Cable Capacity		
			Cat. 6A (.354")	Cat. 6 (.250")	Cat 5e (.187")
A (End)	NFR84, NFEP and NFBRFK	23.7	84	168	320
B (Center)	2 - NFR84, NFBRFK	41.6	147	296	530
C (Center)	2 - NFR84, NFVSM4, NFBRFK	66.6	236	474	848

Note: Capacities are based upon a fill rate of 35% to accommodate proper cable routing techniques.

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NETFRAME® Rack System Roadmap – High Density Solution

- Heavy duty equipment rack with built-in provisions for vertical cable management; extra wide channel design provides vertical pathways for routing of distribution and patch cables within the footprint of the frame



1 NFR84 – NETFRAME® 19" Equipment Rack, 45 RU (page C4.18)



2 NFBRFK – Vertical Cable Management, kit of (8) bend radius fingers (page C4.18)



HINGED DOORS

3a NFD884 – Dual Hinge, 8" wide for use in covering two adjacent pathways (page C4.18)

3b NFD484 – Single Hinge, 4" wide (page C4.18)



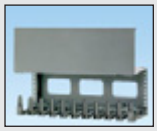
4 NFEP – End Panel (page C4.18)



5 NFLRB – Ladder Rack Support Bracket, for parallel and perpendicular attachment of ladder rack (page C4.18)



6 NCMHAEF4 – Cable Pathway (page C4.22)



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NETFRAME® Cable Management Rack System

- Patented cable management rack
- Rack is UL listed for 1,500 lbs. load rating to accommodate large networking equipment
- Vertical cable management options for mid to high density cabling applications are simple to install and allow user to configure system to their needs
- Pass-through holes on front and side of channels provide convenient patching from front to back or between racks
- 6" deep vertical channel with unequal flange design provides access to cable pathway
- Rack features 19" or 23" EIA mounting
- Rack space identification allows quick and easy location of rack mount items
- Full length dual and single hinged doors provide an aesthetic finish and easy access to the vertical pathway
- Top channel provides pathway for cable or ladder rack up to 18" wide
- Paint piercing washers included to electrically bond rack for simplified grounding
- For the complete grounding solution, see the STRUCTUREDGROUND™ Kits for Racks selection guide on pages C5.12 – C5.13.



NFR84



NFD884



NFVSM4



NFEP

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
NETFRAME® Rack System				
NFR84	NETFRAME® Equipment Rack. Dimensions: 86.0"H x 28.4"W x 17.0"D (2184mm x 721mm x 432mm) floor footprint.	45	1	—
Vertical Cable Management Options				
NFCDRK	Flexible center D-ring, forms a common vertical pathway when two NFR84 racks are installed side by side, (kit of sixteen). Dimensions: 4.0"W x 6.5"D (102mm x 165mm) Capacity: 600 cables, .187" dia.	—	1	—
NFDR4X6K	Flexible vertical D-ring, kit of eight. Dimensions: 3.7"W x 6.5"D (95mm x 165mm) Capacity: 275 cables, .187" dia.	—	1	—
NFSK	Fiber slack spool. Dimensions: 2.6" dia. x 4.6" long (70mm x 116mm)	—	1	10
NFBRF	Bend radius finger manager, section of eleven control fingers. Made of durable plastic. Dimensions: 19.2"H x .9"W x 6.5"D (487mm x 22mm x 165mm)	11	1	—
NFBRFK	Kit of eight NFBRF.	45	1	10
Hinged Doors and Slack Managers				
NFD484	Full length, single hinged metal door conceals vertical cable pathway on NFR84. Dimensions: 84.0"H x 4.4"W x .7"D (2134mm x 112mm x 18mm)	45	1	—
NFD884	Full length, dual hinged metal door conceals vertical cable pathway when used with two NFR84 racks installed side by side or a NFVSM4 between two DR84 racks. Dimensions: 82.8"H x 8.1"W x 1.6"D (2104mm x 206mm x 40mm)	45	1	—
NFD1284	Full length, dual hinged metal door conceals vertical cable pathway when used with a NFVSM4 between two NFR84 racks or a NFVSM8 between two DR84 racks. Dimensions: 82.8"H x 12.1"W x 1.6"D (2103mm x 307mm x 40mm)	45	1	—
NFVSM4	Vertical slack manager, provides additional capacity and slacking area between DR84 racks or NFR84 racks. Includes four slack spools. Dimensions: 4.1"W x 7.3"D x 83.9"H (104mm x 185mm x 2131mm)	45	1	—
Accessories				
NFEDB23	Door mounting bracket for use with NFD484 or DRD284 when rack is assembled for 23" mounting.	—	1	10
NFSHLF19X25	NETFRAME® Shelf. Load rating 250 lbs. Dimensions: .9"H x 18.3"W x 25.0"D (22mm x 465mm x 635mm)	1	1	—
NFSHLF19X18	NETFRAME® Shelf. Load rating 250 lbs. Dimensions: .9"H x 18.3"W x 18.0"D (22mm x 465mm x 457mm)	1	1	—
NFLRB	Ladder rack bracket for parallel or perpendicular attachment of ladder rack up to 18" wide.	—	1	—
NFREB2	Rear mount bracket kit of two, extends rear flanges of NETFRAME® Rack for 19" or 23" EIA mounting.	2	1	10
NFEP	End panel mounts on the side of a NFR84 or DR84 rack concealing cables from view and protecting them from damage.	—	1	—

^One rack space = 1.75" (44.45mm).
All product color is black.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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Horizontal Cable Management Rack Systems



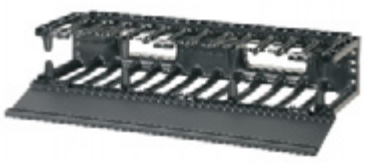
- *PANDUIT® PATCHLINK™*, *NETMANAGER™*, and *OPEN-ACCESS™* Horizontal Cable Managers manage, protect, and showcase cables between patch panels on 19" EIA racks
- *PATCHLINK™* and *NETMANAGER™* Dual Hinged Covers conceal cable pathway and provide easy access without having to remove the door
- Pass-through holes allow front to rear cabling

PATCHLINK™ Horizontal Cable Manager



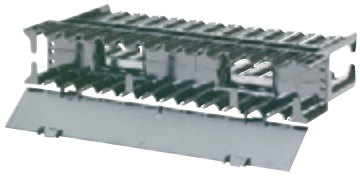
Cable Capacity Chart						
	Category 6 (.250")		Category 5e (.187")		Fiber (3mm)	
Part Number	Front	Back	Front	Back	Front	Back
WMP1E	48	48	72	72	192	192
WMPF1E	48	—	72	—	192	—
WMPFSE	16	—	24	—	72	—
WMPH2E	48	48	72	72	192	192
WMPHF2E	48	—	72	—	192	—
WMPLFSE	12	—	16	—	48	—
WMPLSE	12	12	16	16	48	48
WMPSE	16	16	24	24	72	72

NETMANAGER™ High Capacity Horizontal Cable Manager



Cable Capacity Chart								
	Category 6A (.354")		Category 6 (.250")		Category 5e (.187")		Fiber (3mm)	
Part Number	Front	Back	Front	Back	Front	Back	Front	Back
NM1	12	12	24	24	48	48	120	120
NM2	36	36	78	78	138	138	348	348
NM3	66	66	132	132	246	246	618	618
NM4	96	96	192	192	348	348	882	882
NMF1	12	—	24	—	48	—	120	—
NMF2	36	—	78	—	138	—	348	—
NMF3	66	—	132	—	6	—	618	—
NMF4	96	—	192	—	348	—	882	—

NETMANAGER™ Horizontal Cable Manager



Cable Capacity Chart						
	Category 6 (.250")		Category 5e (.187")		Fiber (3mm)	
Part Number	Front	Back	Front	Back	Front	Back
NCMH2	48	48	72	72	192	192
NCMHF2	48	—	72	—	192	—
NCMHF1	16	—	24	—	72	—

OPEN-ACCESS™ Horizontal Cable Manager



Cable Capacity Chart						
	Category 6 (.250")		Category 5e (.187")		Fiber (3mm)	
Part Number	Front	Back	Front	Back	Front	Back
CMPH1	24	24	40	40	100	100
CMPH2	60	60	96	96	252	252
CMPHF1	24	—	40	—	100	—
CMPHHF1	32	—	52	—	132	—
CMPHF2	60	—	96	—	252	—
CMPHH2	96	—	192	—	504	—

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A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

PATCHLINK™ Horizontal Cable Managers

- Lightweight plastic construction provides durability and easy installation
- Patented dual hinged cover allows cable access without removing cover
- Rounded edges on fingers protect cables from snags and damage to cable
- Flexible fingers allows easy installation and removal of cables
- Increased finger spacing provides larger area for high performance Category 6 cables
- Pass-through holes allow front to rear cabling
- Mount to standard 19" EIA racks and cabinets
- Covers, #12-24 and M6 mounting screws included



WMPSE



WMP1E



WMPH2E



WMPFSE



WMPLFSE



WMPF1E



WMPHF2E

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
19" Manager, Front and Rear, 1 RU			
WMPLSE	1.7"H x 19.0"W x 7.9"D (44mm x 483mm x 200mm).	1	1
WMPSE	1.7"H x 19.0"W x 8.9"D (44mm x 483mm x 226mm).	1	1
19" Manager, Front and Rear, 2 RU			
WMP1E	3.5"H x 19.0"W x 8.9"D (89mm x 483mm x 226mm).	2	1
WMPH2E	3.5"H x 20.2"W x 8.9"D (89mm x 513mm x 226mm). Includes extended front covers and two bend radius clips.	2	1
19" Manager, Front Only, 1 RU			
WMPFSE	1.7"H x 19.0"W x 3.7"D (44mm x 483mm x 94mm).	1	1
WMPLFSE	1.7"H x 19.0"W x 2.7"D (44mm x 483mm x 69mm).	1	1
19" Manager, Front Only, 2 RU			
WMPF1E	3.5"H x 19.0"W x 3.7"D (89mm x 483mm x 94mm).	2	1
WMPHF2E	3.5"H x 20.2"W x 3.7"D (89mm x 573mm x 94mm). Includes extended front covers and two bend radius clips.	2	1

^One rack space = 1.75" (44.45mm).
All product color is black.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

NETMANAGER™ High Capacity Horizontal Cable Managers

- Innovative inset fingers slope inward toward back of managers offering unobstructed access to network cabling for easier moves, adds, and changes
- Large front finger openings easily accommodate Category 6 and 10 GbE cables, speeding installation and reducing maintenance costs
- Rear cable management finger spacing utilizes open D-rings for greater accessibility
- Can be used to create large capacity horizontal pathways for routing cable
- Patented front and rear dual hinged cover allows cable access without removing cover
- Curved surfaces maintain cable bend radius
- Pass-through holes allow for front to rear cabling
- Built in cable retainers hold cable in place for easy moves, adds, and changes
- Mount to 19" EIA racks and cabinets
- Covers, #12-24 and M6 mounting screws included
- Design fits flush to the front of the NETRUNNER™ High Capacity WMPVHCF45E and WMPVHC45E Vertical Managers



NM2



NMF2



NMF3



NMF4

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
19" High Capacity Manager, Front and Rear			
NM1	1.7"H x 19.0"W x 13.1"D (44mm x 482mm x 332mm).	1	1
NM2	3.5"H x 19.0"W x 13.1"D (88mm x 482mm x 332mm).	2	1
NM3	5.2"H x 19.0"W x 13.1"D (133mm x 482mm x 332mm).	3	1
NM4	7.0"H x 19.0"W x 13.1"D (177mm x 482mm x 332mm).	4	1
19" High Capacity Manager, Front Only			
NMF1	1.7"H x 19.0"W x 6.2"D (44mm x 482mm x 157mm).	1	1
NMF2	3.5"H x 19.0"W x 6.2"D (88mm x 482mm x 157mm).	2	1
NMF3	5.2"H x 19.0"W x 6.2"D (133mm x 482mm x 157mm).	3	1
NMF4	7.0"H x 19.0"W x 6.2"D (177mm x 482mm x 157mm).	4	1

^One rack space = 1.75" (44.45mm)
All product color is black.

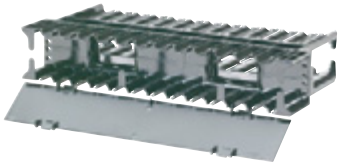
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NETMANAGER™ Horizontal Cable Managers

- Patented design
- Lightweight plastic construction provides durability and easy installation
- Removable front cover hinges 180° up or down to allow access without removing cover
- Curved surfaces maintain cable bend radius
- Pass-through holes allow for front to rear cabling
- Built in cable retainers hold cable in place for easy moves, adds, and changes
- Mount to 19" EIA racks and cabinets
- Covers, #12-24 and M6 mounting screws included



NCMHF1



NCMH2

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
NCMHF1	1.7"H x 19.0"W x 3.7"D (44mm x 483mm x 95mm).	1	1
NCMHF2	3.5"H x 19.0"W x 3.7"D (88mm x 483mm x 95mm).	2	1
NCMH2	3.5"H x 19.0"W x 9.8"D (88mm x 483mm x 248mm). Snap-on rear cover.	2	1

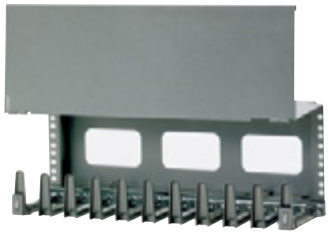
^One rack space = 1.75" (44.45mm).
All product color is black.

High Capacity Horizontal Cable Managers

- Manage cables on switches with vertical cards
- Curved cable management fingers support cables as they transition to the vertical pathway
- Can be used to create cable pathways for routing cable
- Steel hinged cover provides easy access to pathway
- Pass-through holes on top and back of manager
- Mount to 19" EIA racks and cabinets
- Mounting hardware included



NCMHAEF2



NCMHAEF4

Part Number	Part Description	No. of Rack Spaces^	Cable Capacity				Std. Pkg. Qty.
			Cat. 6A (.354")	Cat. 6 (.250")	Cat. 5e (.187")	Fiber (3mm)	
NCMHAEF2	Horizontal manager with hinged cover. Dimensions: 3.5"H x 19.0"W x 8.0"D (88mm x 483mm x 204mm)	45	84	108	144	432	1
NCMHAEF4	Horizontal manager with hinged cover. Dimensions: 7.0"H x 19.0"W x 8.0"D (177mm x 483mm x 204mm)	45	168	216	288	864	1

One rack space = 1.75" (44.45mm).
All product color is black.

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OPEN-ACCESS™ Horizontal Cable Managers

- D-ring managers provide an open and efficient way to manage cable
- Patented D-ring design provides flexibility for easy moves, adds and changes
- Optional snap-on cover
- Pass-through holes allow front to rear cabling
- Mount to 19" EIA racks and cabinets
- Hardware included


CMPH1


CMPH2


CMPHF1


CMPHHF1


CMPHF2


CMPHH2

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
19" Manager, Front and Rear, 1 RU			
CMPH1	D-rings installed on panels. 1.7"H x 19.0"W x 8.6"D (44mm x 483mm x 218mm).	1	1
19" Manager, Front and Rear, 2 RU			
CMPH2	D-rings installed on panel. 3.5"H x 19.0"W x 8.6"D (88mm x 483mm x 218mm).	2	1
19" Manager, Front Only, 1 RU			
CMPHF1	D-rings installed on panel. 1.7"H x 19.0"W x 3.4"D (44mm x 483mm x 87mm).	1	1
CMPHHF1	D-rings installed on panel. 1.7"H x 19.0"W x 5.7"D (44mm x 483mm x 144mm).	1	1
19" Manager, Front Only, 2 RU			
CMPHF2	D-rings installed on panel. 3.5"H x 19.0"W x 3.4"D (88mm x 483mm x 87mm).	2	1
CMPHH2	D-rings installed on panel. 3.5"H x 19.0"W x 5.7"D (88mm x 483mm x 144mm).	2	1
Optional Covers			
CMPH1C	Snap-on cover for 1 RU D-ring panels. Width 19.4" (492mm).	1	1
CMPH2C	Snap-on cover for 2 RU D-ring panels. Width 19.4" (492mm).	2	1

^One rack space = 1.75" (44.45mm).
All product color is black.

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Vertical D-Rings

- Patented cable manager ring
- Standard EIA hole spacing allows product to be mounted to any standard rack
- Flexible material allows arm to rotate 90° so entire cable bundle can be inserted and removed
- Rounded edges prevent damage to cable insulation
- 1/4" mounting hole allows for a variety of screws to secure the D-ring to a surface
- Create a structured pathway and allows for open access



CMVDR1



CMVDR1S



CMVDR2



CMVDR2S



CMVDRC

Part Number	Part Description	Cable Capacity			Std. Pkg. Qty.
		Cat. 6A (.354")	Cat. 6 (.250")	Cat. 5e (.187")	
CMVDR1	Vertical D-ring. Outside dimensions 5.70 "L x 2.00"W	40	96	48	1
CMVDR1S	Vertical D-ring. Outside dimensions 3.30"L x 2.00"W	20	52	32	1
CMVDR2	Vertical D-ring. Outside dimensions 5.70"L x 3.00"W	80	192	96	1
CMVDR2S	Vertical D-ring. Outside dimensions 3.30"L x 3.00"W	40	96	48	1
CMVDRC	Center mounted vertical D-ring for routing cables between two adjacent racks. Requires 8.25" spacing between the center lines of the adjacent rack's mounting holes. Outside dimensions 5.60"L x 8.00"W	200	400	200	1

One rack space = 1.75" (44.45mm).
All product color is black.

Cable Routing Troughs

- Provide pathways to route cables in a rack line-up



CMLT19



CMUT19



CMT4

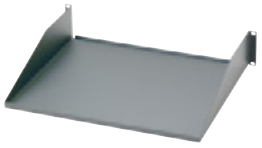
Part Number	Part Description	Cable Capacity				Std. Pkg. Qty.
		Cat. 6A (.354")	Cat. 6 (.250")	Cat. 5e (.187")	Fiber (3mm)	
CMLT19	4 RU lower trough with 1.3" bend radius mounts to the bottom of a standard 19" EIA rack. Dimensions: 8.0"H x 19.0"W x 4.5"D (203mm x 483mm x 114mm)	64	125	224	564	1
CMUT19	2 RU upper trough with 1.3" bend radius mounts to the top of a standard 19" EIA rack. Dimensions: 3.5."H x 19.0"W x 4.5"D (89mm x 483mm x 114mm)	42	83	148	373	1
CMT4	4 RU cable routing trough. Dimensions: 6.9"H x 19.0"W x 4.5"D (176mm x 483mm x 114mm)	124	223	399	1002	1

One rack space = 1.75" (44.45mm).
All product color is black.

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Rack Mount Shelves

• Load ratings up to 250 lbs. refer to part descriptions for specific load ratings



SRM19FM2



SRM19CMV3



SRM19X18A1

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
SRM19FM1	19" front mount shelf, steel. Dimensions: 1.7"H x 19.0"W x 15.2"D (44mm x 483mm x 385mm) Load rating 30 lbs.	1	1
SRM19FM2	19" front mount shelf, steel. Dimensions: 3.5"H x 19.0"W x 15.2"D (88mm x 483mm x 385mm) Load rating 50 lbs.	2	1
SRM19CMV3	19" cantilevered shelf, vented aluminum. Includes two-piece shelf that mounts to front and back of EIA racks.* Dimensions: 5.2"H x 19.2"W x 12.5"D (133mm x 489mm x 316mm) Load rating 200 lbs.	3	1
SRM19CM3	19" cantilevered shelf, aluminum. Includes two-piece shelf that mounts to front and back of EIA racks.* Dimensions: 5.2"H x 19.2"W x 12.5"D (133mm x 489mm x 316mm) Load rating 200 lbs.	3	1
SRM19X18A1	19" adjustable mount shelf, steel, mounts to front and back of EIA racks.* Dimensions: 1.8"H x 19.0"W x 18.0"D (44mm x 483mm x 457mm) Load rating 250 lbs.	1	1
SRM19X25A1	19" adjustable mount shelf, steel, mounts to front and back of EIA racks.* Dimensions: 1.8"H x 19.0"W x 25.0"D (44mm x 483mm x 635mm) Load rating 250 lbs.	1	1

^One rack space = 1.75" (44.45mm).
All product color is black.
*For NETFRAME® Shelves see page C4.19.

Panel Extender Brackets

• Allow for mounting 19" product on 23" standard EIA racks or cabinets
• Offset bracket design maintains flush mounting of panels
• Mounting hardware included



PEB1



PEB2

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
PEB1	Converts 19" horizontal panels to 23" panels.	1	1	10
PEB2	Converts 19" horizontal panels to 23" panels.	2	1	10

^One rack space = 1.75". (44.45mm).
All product color is black.

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c UL us Rack Mount Power Strips

- Mounting brackets and screws included


CMRPSH15


CMRPSH20


RPSH163C13TL6


CMRPSV20


CMRPSVD20


RPSH103C13TL6M


RPSV243620TL6

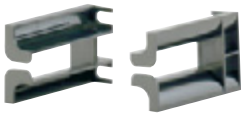
Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
Horizontal			
CMRPSH15	19" horizontal power strip 15 A, 125 V, ten NEMA 5-15R receptacles, one 15 A thermal breaker, 10' power cord with NEMA 5-15P plug. UL and c-UL Recognized. Dimensions: 1.7"H x 19.0"W x 3.8"D (44mm x 483mm x 95mm)	1	1
CMRPSH20	19" horizontal power strip 20 A, 125 V, ten NEMA 5-20R receptacles, one 20 A thermal breaker, 10' power cord with NEMA 5-20P plug. UL and c-UL Recognized. Dimensions: 1.7"H x 19.0"W x 3.8"D (44mm x 483mm x 95mm)	1	1
CMRPSH20CM	19" horizontal power strip 20 A, 125 V, ten NEMA 5-20R receptacles, one 20 A thermal breaker, red LED current monitor, 10' power cord with NEMA 5-20P plug. UL and c-UL Recognized. Dimensions: 1.7"H x 19.0"W x 3.8"D (43mm x 483mm x 95mm)	1	1
RPSH163C13TL6	19" horizontal power strip 30 A, 250 V, sixteen IEC C-13 receptacles, four 15 A thermal breakers, 10' power cord with NEMA L6-30P twist lock plug. UL and c-UL Listed. Dimensions: 3.5"H x 19.0"W x 1.6"D (88mm x 483mm x 41mm)	2	1
Vertical			
CMRPSV20	Vertical power strip with a 20 A, 125 V, ten NEMA 5-20R receptacles, one 20 A thermal breaker, 10' power cord with NEMA 5-20P plug. UL and c-UL Recognized. Dimensions: 38.5"H x 1.9"W x 1.3"D (978mm x 47mm x 33mm)	—	1
CMRPSVD20	Vertical power strip with dual 20 A, 125 V circuits, ten NEMA 5-20R receptacles per circuit, two 20 A thermal breakers, two 10' power cords with NEMA 5-20P plugs. UL and c-UL Listed. Dimensions: 66.3"H x 1.9"W x 1.3"D (1683mm x 47mm x 33mm)	—	1
RPSH103C13TL6M	19" horizontal or vertical power strip 30 A, 250 V, ten IEC C-13 receptacles, four 15 A thermal breakers, red LED current monitor, 10' power cord with NEMA L6-30P twist lock plug. Mounts horizontal or vertical. UL and c-UL Listed. Dimensions: 1.7"H x 19.0"W x 1.6"D (43mm x 483mm x 41mm)	1	1
RPSV243520TL5	Vertical power strip 30 A, 125 V, 24 NEMA 5-20R receptacles, two 20 A single pole magnetic breaker/switch with integral switch guard, 10' power cord with NEMA L5-30P twist lock plug. UL and c-UL Listed. Dimensions: 66.3"H x 2.0"W x 2.0"D (1683mm x 51mm x 51mm)	—	1
RPSV243620TL6	Vertical power strip 30 A, 250 V, 24 NEMA 6-20R receptacles, two 20 A double pole magnetic breaker/switch with integral switch guard, 10' power cord with NEMA L6-30P twist lock plug. UL and c-UL Listed. Dimensions: 66.3"H x 2.0"W x 2.0"D (1683mm x 51mm x 51mm)	—	1

^One rack space = 1.75". (44.45mm).
All product color is black.

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Rack Mount Cable Management Accessories

- Bend radius control fingers support cables as they transition to the vertical pathway
- Finger spacing aligns with rack units
- Attach to patch panels or equipment mounting screws
- Lightweight plastic construction provides durability and easy installation



CMBRC1



CMBRC5E

Part Number	Part Description	No. of Rack Spaces^	Std. Ctn. Qty.
CMBRC1	Kit of two bend radius control fingers; for use with patch panels. Maintains 1/2" bend radius control. Dimensions: 1.7"H x .8" W x 3.0"D (44mm x 19mm x 77mm)	1	10
CMBRC1E	Kit of two bend radius control fingers, for use with patch panels. Maintains 1/2" bend radius control. Dimensions: 1.7"H x 1.0"W x 5.1"D (44mm x 25mm x 129mm)	1	10
CMBRC5	One-piece unit with five bend radius control fingers; for use with active equipment. Maintains 1/4" bend radius control. Dimensions: 8.7"H x 1.0"W x 3.3"D (222mm x 26mm x 84mm)	5	10
CMBRC5E	One-piece unit with five bend radius control fingers; for use with active equipment. Maintains 1/4" bend radius control. Dimensions: 8.7"H x 1.0"W x 5.1"D (222mm x 26mm x 129mm)	5	10

^One rack space = 1.75" (44.45mm).
All product color is black.

Hinged Wall Brackets

- Mount to wall or standard EIA 19" rack
- Cable tie slots
- Standard 19" EIA hole spacing
- Panel rotates from one side for easy access to cabling
- Include write-on labeling area
- Accept 19" patch panels, horizontal managers, and equipment



WBH1



WBH2



WBH3



WBH4



WBH4E

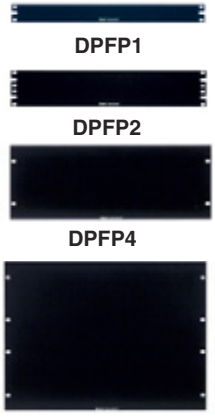
Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
6" Deep Wall Brackets			
WBH1	Dimensions: 1.8"H x 20.2"W x 6.3"D (44mm x 513mm x 159mm) Load rating 10 lbs.	1	1
WBH2	Dimensions: 3.5"H x 20.2"W x 6.3"D (89mm x 513mm x 159mm) Load rating 20 lbs.	2	1
WBH3	Dimensions: 5.3"H x 20.2"W x 6.3"D (133mm x 513mm x 159mm) Load rating 30 lbs.	3	1
WBH4	Dimensions: 7.0"H x 20.2"W x 6.3"D (178mm x 513mm x 159mm) Load rating 40 lbs.	4	1
15" Deep Wall Brackets			
WBH2E	Dimensions: 3.5"H x 20.4"W x 15.8"D (89mm x 519mm x 402mm) Load rating 20 lbs.	2	1
WBH4E	Dimensions: 7.0"H x 20.4"W x 15.8"D (177mm x 519mm x 402mm) Load rating 40 lbs.	4	1
WBH6E	Dimensions: 10.5"H x 20.4"W x 15.8"D (267mm x 519mm x 402mm) Load rating 60 lbs.	6	1

^One rack space = 1.75" (44.45mm).
All product color is black.

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Rack Filler Panels

- Reserve rack space for future use
- Direct airflow in cabinet applications
- Mount to standard EIA 19" racks or cabinets
- #12-24 and M6 mounting screws included



Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
DPFP1	Dimensions: 1.8"H x 19.0"W (44mm x 483mm).	1	1	10
DPFP2	Dimensions: 3.5"H x 19.0"W (89mm x 483mm).	2	1	10
DPFP4	Dimensions: 7.0"H x 19.0"W (178mm x 483mm).	4	1	10
DPFP8	Dimensions: 14.0"H x 19.0"W (355mm x 483mm).	8	1	10

^One rack space = 1.75" (44.45mm).
All product color is black.

Angled Panel Accessories

- Aesthetic design provides a clean and consistent look when used with *PANDUIT* angled patch panels
- Support warm aisle/cold aisle methodology by sealing in cool air and not allowing it to escape, promoting proper airflow and cooling
- Protect exposed connectors from intrusion of debris or accidental disconnection



Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
CPAF1BLY	Covers one open rack space in standard EIA 19" rack.	1	1	10
CPAF2BLY	Covers two open rack spaces in standard EIA 19" rack.	2	1	10

^One rack space = 1.75" (44.45mm).
All product color is black.

IN-CABINET Vertical Cable Managers

- For managing cable within cabinets 27" or wider
- Attach to equipment mounting rails
- Two mounting bracket options to facilitate mounting to various cabinet configurations
- Snap-on covers included


Front Mount Bracket


Side Mount Bracket


CWMPV3340

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
Side Mount – Front Only			
CWMPV3440	Duct with side mount bracket, cage nut, and screws. Dimensions: 71.9"H x 3.5"W x 4.3"D (1825mm x 88mm x 109mm) Capacity: 96 cables .187 dia.	40	1
CWMPV2440	Duct with side mount bracket, cage nut, and screws. Dimensions: 71.9"H x 2.5"W x 4.3"D (1825mm x 63mm x 109mm) Capacity: 60 cables .187 dia.	40	1
Front Mount – Front Only			
CWMPV2340	Duct with front mount bracket, cage nut, and screws. Dimensions: 70.0"H x 3.7"W x 3.3"D (1778mm x 94mm x 83mm) Capacity: 48 cables .187 dia.	40	1
CWMPV3340	Duct with front mount bracket, cage nut, and screws. Dimensions: 70.0"H x 4.7"W x 3.3"D (1778mm x 119mm x 83mm) Capacity: 72 cables .187 dia.	40	1

^One rack space = 1.75" (44.45mm).
All product color is black.

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Communication Cable Management Kit for Cabinets

- Kit of cable management accessories specifically designed for use in a network cabinet or enclosure

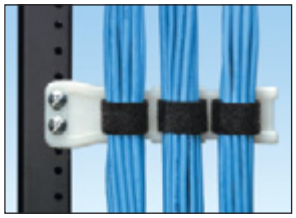


Part Number	Part Description	Std. Pkg. Qty.*	Std. Ctn. Qty.
CCMKIT1	Kit includes the following: 1 roll (15' length) .33" *TAK-TY®* Cable Ties 24 nylon cable ties 12 adhesive backed cable tie mounts 6 push style cable tie mounts 4 vertical wire saddles 8 flat *PAN-POST™* Standoffs for use with std. nylon cable ties.	1	100
CCMKIT2	Kit includes the following: 1 roll (15' length) .75" *TAK-TY®* Cable Ties 12 nylon cable ties 6 adhesive backed cable tie mounts 6 adhesive backed mounts for .75" *TAK-TY®* Cable Ties 6 screw mounts for .75" *TAK-TY®* Cable Ties 4 vertical wire saddles 6 flat *PAN-POST™* Standoffs for use with .75" *TAK-TY®* Cable Ties	1	100

*Order the number of kits required.

Flat *PAN-POST™* Standoffs

- Standard EIA hole spacing allows product to be mounted with user supplied screws up to 1/4" (M6) diameter
- Organize cables in standard cabinets and racks
- Use where space is limited



PPF2SV-S25-V
PPF2SV-S25-V69
PPF2S-S25-V
PPF2S-S25-V69

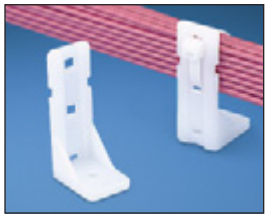
Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
Flat *PAN-POST™* Standoff for *TAK-TY®* Hook & Loop Cable Ties			
PPF2SV-S25-V	Nylon 6.6 flat *PAN-POST™* Standoff. Use with *TAK-TY®* Hook & Loop Cable Ties. Dimensions 5.6"L x 1.6"H x .2"W (142.2mm x 40.6mm x 5.1mm).	5	100
PPF2SV-S25-V69	Flame retardant Nylon 6.6 flat *PAN-POST™* Standoff. Use with *TAK-TY®* Hook & Loop Cable Ties. Material meets UL 94V-0 specifications. Dimensions 5.6"L x 1.6"H x .2"W (144.8mm x 53.3mm x 5.1mm).	5	100
Flat *PAN-POST™* Standoff for Nylon Cable Ties			
PPF2S-S25-V	Nylon 6.6 flat *PAN-POST™* Standoff. Use with miniature, intermediate and standard cross section cable ties. Dimensions 5.4"L x 1.5"H x .2"W (137.2mm x 38.1mm x 5.1mm).	5	100
PPF2S-S25-V69	Flame retardant Nylon 6.6 flat *PAN-POST™* Standoff. Use with miniature, intermediate and standard cross section cable ties. Material meets UL 94V-0 specifications. Dimensions 5.4"L x 1.5"H x .2"W (137.2mm x 38.1mm x 5.1mm).	5	100

All product color is natural.

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PAN-POST™ Standoff

- Manufactured from natural Nylon 6.6
- For indoor use only
- Supports cable bundles above or away from surface

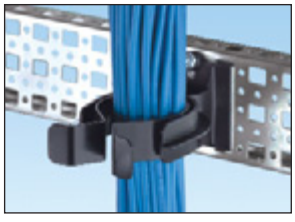


Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
PP1S-S10-X	PAN-POST™ Standoff, mounting method #10/M5 screw, 1.1" x .75" x 2" (27.9mm x 19.1mm x 51mm). Used with cable ties M,I,S	10	100
PP1S-S12-X	PAN-POST™ Standoff, mounting method #12/M5.5 screw, 1.1" x .75" x 2" (27.9mm x 19.1mm x 51mm). Used with cable ties M,I,S	10	100
PP2S-S10-X	PAN-POST™ Standoff, mounting method #10/M5 screw, 1.1" x .75" x 4.62" (27.9mm x 19.1mm x 117.3mm). Used with cable ties M,I,S	10	100
PP2S-S12-X	PAN-POST™ Standoff, mounting method #12/M5.5 screw, 1.1" x .75" x 4.62" (27.9mm x 19.1mm x 117.3mm). Used with cable ties M,I,S	10	100

All product color is natural.
Cable Tie Cross Section Sizes: M = Miniature, I = Intermediate, S = Standard.

Bundle Retainers

- Supports cable in vertical or horizontal configurations
- Spring fingers with large lead-in facilitates insertion of cable bundles
- Adhesive backed and screw applied versions available



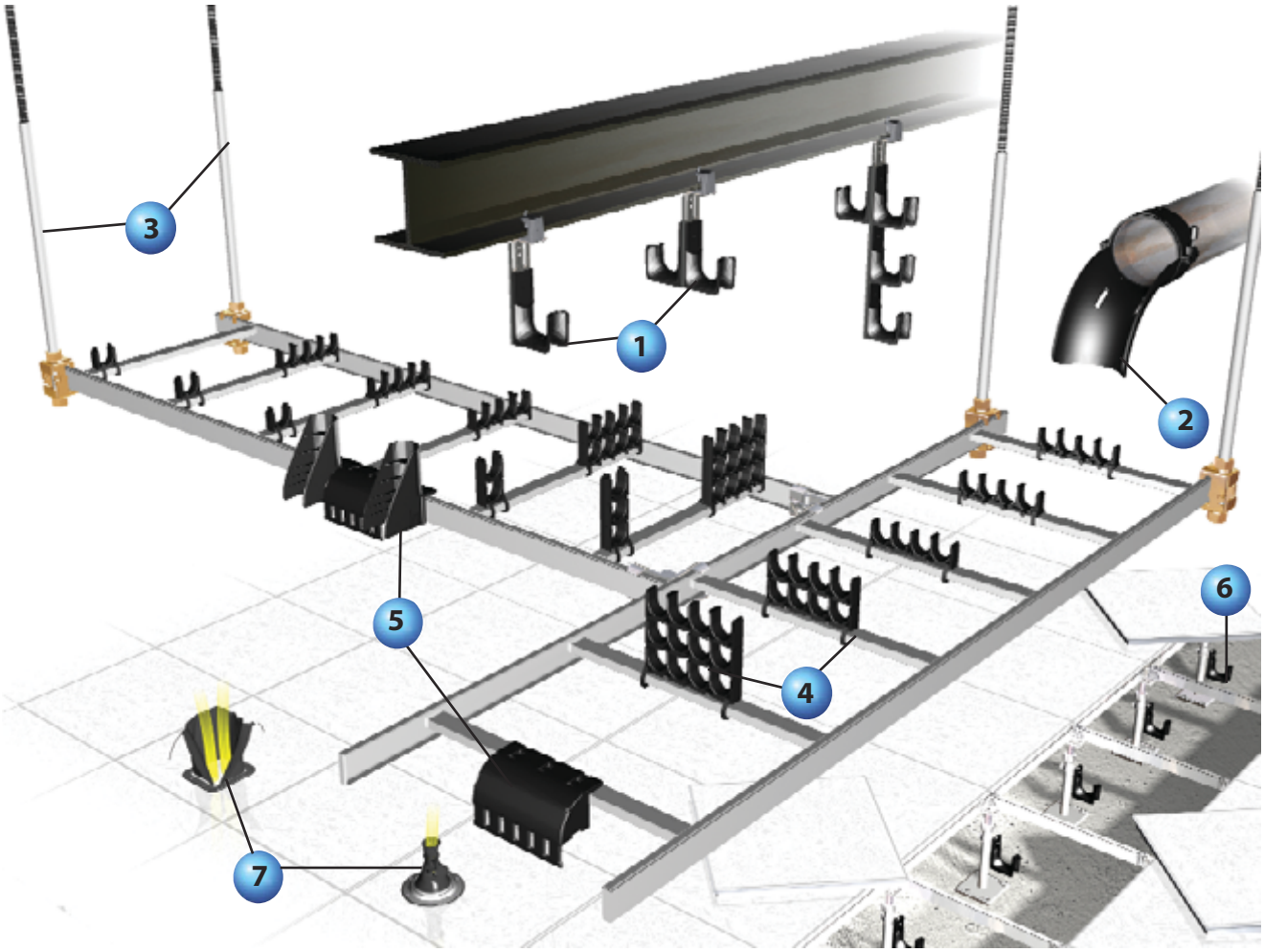
BR2-1.3

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
BR2-1.3	Standard EIA hole spacing for mounting. Maximum bundle capacity: 2.0" (50.8mm).	1	10
BR2-1.3-A	Adhesive base and standard EIA hole spacing provides mounting options. Maximum bundle capacity: 2.0" (50.8mm).	1	10

All product color is black.

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Cable Management Accessories Roadmap



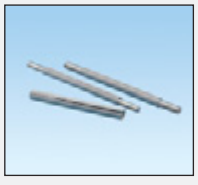
1 ***J-MOD®*** **and** ***J-PRO™*** **Cable Support System (pages C4.32 – C4.36)**



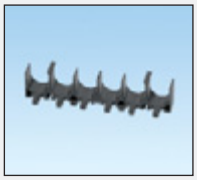
2 **CWF400 – Conduit Waterfall (page C4.37)**



3 **TRC18FR-X8 – Threaded Rod Cover (page C4.37)**



4 **Stackable Cable Rack Spacers (page C4.37)**



5 **CMW – Waterfall Accessories (page C4.38)**



6 **JP2UF100-L20 –** ***J-PRO™*** **Cable Support System (page C4.34 – C4.36)**



7 **RFG – Raised Floor Grommet (page C4.12)**



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J-MOD® Cable Support System

- Complete horizontal and vertical 1" bend radius control
- Suitable for use in air handling spaces per UL 2043
- Brackets allow for attachment to ceilings, beams, threaded rods and drop wires to meet requirements of a variety of applications
- Cables do not come in contact with metal
- Modular design allows flexibility to assemble system in multiple configurations
- Unique chaining bracket design creates a strong metal backbone and allows expansion of the system without disturbance of an existing installation

Typical Installation Instructions Using Threaded Rod Bracket and Chaining Bracket



Align snap lock attachment of J Hook with holes in chosen bracket and snap J Hook into place



Align chaining bracket under the assembly



Slide chaining bracket between J Hook and the metal bracket until it snaps



Pull down to fully engage



Attach J Hooks as explained in first-level installation above



Final assembly is a second-level installation consisting of one threaded rod bracket, one chaining bracket, and two J Hooks for clarity

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c UL us LISTED *J-MOD*® Cable Support System (continued)


JMJH2W-X20


JMJH2-X20


JMCB-X


JMCMB25-1-X


JMCMB25-3-X


JMDWB-1-X


JMDWB-3-X


JMTRB38-1-X


JMTRB38-3-X


JMSBCB87-1-X


JMSBCB87-3-X

Part Number	Part Description	Material**	Max. Static Load		Std. Pkg. Qty.	Std. Ctn. Qty.
			Lbs.	kg.		
J Hook with Maximum 2" Bundle Capacity						
JMJH2W-X20‡	J Hook for wall mount applications only. Two 1/4" (M6) mounting holes for user supplied screws.	Nylon 6.6	30	13.61	10	50
JMJH2-X20‡	J Hook with snap lock attachments for use with all brackets listed below.	Nylon 6.6	30	13.61	10	50
Chaining Bracket						
JMCB-X	Chaining bracket to extend *J-MOD*® capacity one level. Capacity: three levels maximum. For use with all single-level mounting brackets listed below.	Zinc Plated Steel	120	54.45	10	50
Ceiling Mount Brackets						
JMCMB25-1-X	Single-level ceiling mount bracket with one 1/4" (M6) mounting hole.	Galvanized Steel	180	81.65	10	50
JMCMB25-3-X*	Three-level ceiling mount bracket with one 1/4" (M6) mounting hole. Maximum capacity of six J Hooks.	Galvanized Steel	180	81.65	10	50
Drop Wire Brackets						
JMDWB-1-X	Single-level drop wire bracket. Attaches to #12 wire or 1/4" plain rod. Maximum capacity of one J Hook per level.	Galvanized Steel with Metal Attachments	20	9.07	10	50
JMDWB-3-X*	Three-level drop wire bracket. Attaches to #12 wire or 1/4" plain rod. Maximum capacity of one J Hook for each of three levels.	Galvanized Steel with Metal Attachments	40	18.14	10	50
Threaded Rod Brackets						
JMTRB38-1-X	Single-level threaded rod bracket. Accepts 1/4" – 3/8" threaded rod.	Galvanized Steel with Metal Attachments	180	81.65	10	50
JMTRB38-3-X*	Three-level threaded rod bracket. Accepts 1/4" – 3/8" threaded rod. Maximum capacity of six J Hooks.	Galvanized Steel with Metal Attachments	180	81.65	10	50
Screw-On Beam Clamp Brackets						
JMSBCB87-1-X	Single-level screw-on beam clamp bracket for use with flanges up to 3/4" thick.	Galvanized Steel with Metal Attachments	180	81.65	10	50
JMSBCB87-3-X*	Three-level screw-on beam clamp bracket for use with flanges up to 3/4" thick. Maximum capacity of six J Hooks.	Galvanized Steel with Metal Attachments	180	81.65	10	50

*Not for use with chaining brackets.
**Material: Hooks are black Nylon 6.6. Brackets are galvanized or zinc plated steel with metal attachments. For use in air handling spaces.
‡Maximum Cable Capacity: *10GIG*™ = 28, Category 5e = 64, Category 6 = 50, Category 6 *PLUS* = 45.

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J-PRO™ Cable Support System

- Complete horizontal and vertical 1" bend radius control helps prevent degradation of cable performance
- UL 2043 and CAN/ULC S102.2 approved and are suitable for use in air handling spaces
- Pre-riveted assemblies allow for attachment to ceilings, beams, threaded rods, drop wires and under floor supports to meet requirements of a variety of applications
- Wide cable support base prevents pinch points that could cause damage to cables
- Cable tie channel allows user to easily install 3/4" TAK-TY® Cable Ties to retain cable bundle
- Durable non-metallic J Hook materials provide the ability to manage and support a large number of cables



JP2W-L20



JP2WP-L20



JP2CM-L20



JP2DW-L20

Part Number	Part Description	Max. Bundle Capacity		Max. Cable Capacity			Max. Static Load		Std. Pkg. Qty.
		In.	mm	Cat. 6A (.354")	Cat. 6 (.250")	Cat. 5e (.187")	Lbs.	kg.	
Wall Mount									
JP75W-L20‡	J Hook for wall mount applications. One 1/4" (M6) mounting hole for user supplied screw.	.75	19.0	2	11	15	15	6.81	50
JP131W-L20		1.31	33.3	9	26	32	20	9.07	50
JP2W-L20‡		2.00	50.8	23	50	64	30	13.61	50
JP4W-X20		4.00	101.6	103	225	250	100	45.37	10
Wall Mount with Bracket									
JP75WP-L20	J Hook for powder actuated installation on walls. One 5/32" (M4) mounting hole for user supplied fasteners.	.75	19.0	2	11	15	15	6.81	50
JP131WP-L20		1.31	33.3	9	26	32	20	9.07	50
JP2WP-L20		2.00	50.8	23	50	64	30	13.61	50
JP4WP-X20		4.00	101.6	103	225	250	100	45.37	10
Ceiling Mount									
JP75CM-L20‡	J Hook with ceiling mount bracket that has one 3/16" (M5), 1/4" (M6) and 3/8" (M10) mounting hole.	.75	19.0	2	11	15	15	6.81	50
JP131CM-L20		1.31	33.3	9	26	32	20	9.07	50
JP2CM-L20‡		2.00	50.8	23	50	64	30	13.61	50
JP4CM-X20		4.00	101.6	103	225	250	100	45.37	10
Drop Wire and Threaded Rod Clip									
JP75DW-L20‡	J Hook with clip for use with #12 wire, threaded rod up to 1/4" in diameter, or 1/8" – 1/4" thick flanges.	.75	19.0	2	11	15	10	4.53	50
JP131DW-L20		1.31	33.3	9	26	32	10	4.53	50
JP2DW-L20‡		2.00	50.8	23	50	64	10	4.53	50

Suitable for use in air handling spaces in accordance with Sec. 300-22(c) and (d) of the National Electrical Code. JP4 family of parts suitable for use in single unit configurations.
Listed in accordance with CAN/ULC S102.2 when mounted as single units or in pairs. Minimum spacing of 4' (1220mm) required between mount points. (Flame Spread Rating = 0, Smoke Developed Classification = 30)
‡Standard product is black in color. For red replace – L20 with – L2 in part number suffix.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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c UL us LISTED J-PRO™ Cable Support System (continued)


JP2SBC50R-L20


JP2SBC50-L20


JP2SBC87-L20


JP2SBC87R-L20


JP2HBC25R-L20
JP2HBC50R-L20
JP2HBC75R-L20

Part Number	Part Description	Max. Bundle Capacity In.	Max. Bundle Capacity mm	Max. Cable Capacity Cat. 6A (.354")	Max. Cable Capacity Cat. 6 (.250")	Max. Cable Capacity Cat. 5e (.187")	Max. Static Load Lbs.	Max. Static Load kg.	Std. Pkg. Qty.
Screw-On Beam Clamps									
JP75SBC50-L20‡	J Hook with screw-on beam clamp for use with flanges up to 1/2" thick.	.75	19.0	2	11	15	15	6.81	50
JP131SBC50-L20		1.31	33.3	9	26	32	20	9.07	50
JP2SBC50-L20‡		2.00	50.8	23	50	64	30	13.61	50
JP4SBC50-X20		4.00	101.6	103	225	250	100	45.37	10
JP75SBC50R-L20	J Hook with screw-on beam clamp for use with flanges up to 1/2" thick. Rotates 360 degrees.	.75	19.0	2	11	15	15	6.81	50
JP131SBC50R-L20		1.31	33.3	9	26	32	20	9.07	50
JP2SBC50R-L20		2.00	50.8	23	50	64	30	13.61	50
JP4SBC50R-X20		4.00	101.6	103	225	250	30	13.61	10
JP75SBC87-L20	J Hook with screw-on beam clamp for use with flanges up to 3/4" thick.	.75	19.0	2	11	15	15	6.81	50
JP131SBC87-L20		1.31	33.3	9	26	32	20	9.07	50
JP2SBC87-L20		2.00	50.8	23	50	64	30	13.61	50
JP4SBC87-X20		4.00	101.6	103	225	250	100	45.37	10
JP75SBC87R-L20		.75	19.0	2	11	15	15	6.81	50
JP131SBC87R-L20		1.31	33.3	9	26	32	20	9.07	50
JP2SBC87R-L20		2.00	50.8	23	50	64	30	13.61	50
JP4SBC87R-X20		4.00	101.6	103	225	250	100	45.37	10
Hammer-On Beam Clamps									
JP75HBC25R-L20	J Hook with hammer-on beam clamp for use with flanges 1/8" – 1/4" thick. Rotates 360 degrees.	.75	19.0	2	11	15	30	13.61	50
JP131HBC25R-L20		1.31	33.3	9	26	32	30	13.61	50
JP2HBC25R-L20		2.00	50.8	23	50	64	30	13.61	50
JP4HBC25R-X20		4.00	101.6	103	225	250	30	13.61	50
JP75HBC50R-L20	J Hook with hammer-on beam clamp for use with flanges 5/16" – 1/2" thick. Rotates 360 degrees.	.75	19.0	2	11	15	30	13.61	50
JP131HBC50R-L20		1.31	33.3	9	26	32	30	13.61	50
JP2HBC50R-L20		2.00	50.8	23	50	64	30	13.61	50
JP4HBC50R-X20		4.00	101.6	103	225	250	30	13.61	10
JP75HBC75R-L20	J Hook with hammer-on beam clamp for use with flanges 9/16" – 3/4" thick. Rotates 360 degrees.	.75	19.0	2	11	15	15	6.81	50
JP131HBC75R-L20		1.31	33.3	9	26	32	20	9.07	50
JP2HBC75R-L20		2.00	50.8	23	50	64	30	13.61	50
JP4HBC75R-X20		.75	19.0	103	11	15	30	13.61	50

Suitable for use in air handling spaces in accordance with Sec. 300-22(c) and (d) of the National Electrical Code. JP4 family of parts suitable for use in single unit configurations.
Listed in accordance with CAN/ULC S102.2 when mounted as single units or in pairs. Minimum spacing of 4' (1220mm) required between mount points. (Flame Spread Rating = 0, Smoke Developed Classification = 30)
‡Standard product is black in color. For red replace – L20 with – L2 in part number suffix.

Table continued on page C4.36

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J-PRO™ Cable Support System (continued)



JP2ZP-L20



JP2CP-L20



JP2UF100-L20

Part Number	Part Description	Max. Bundle Capacity		Max. Cable Capacity			Max. Static Load		Std. Pkg. Qty.
		In.	mm	Cat. 6A (.354")	Cat. 6 (.250")	Cat. 5e (.187")	Lbs.	kg.	
Z Purlin Clips									
JP75ZP-L20	J Hook with z-purlin clip for use with angled flanges up to 1/4" thick.	.75	19.0	2	11	15	15	6.81	50
JP131ZP-L20		1.31	33.3	9	26	32	20	9.07	50
JP2ZP-L20		2.00	50.8	23	50	64	30	13.61	50
JP4ZP-X20		4.00	101.6	103	225	250	60	27.22	10
C Purlin Clips									
JP75CP-L20	J Hook with c-purlin clip for use with vertical flanges up to 1/4" thick.	.75	19.0	2	11	15	15	6.81	50
JP131CP-L20		1.31	33.3	9	26	32	20	9.07	50
JP2CP-L20		2.00	50.8	23	50	64	30	13.61	50
JP4CP-X20		4.00	101.6	103	225	250	60	27.22	10
Underfloor Pedestal Support Clamp									
JP75UF100-L20	J Hook with underfloor pedestal support clamp for use with pedestal support up to 1" diameter.	.75	19.0	2	11	15	15	6.81	50
JP131UF100-L20		1.31	33.3	9	26	32	20	9.07	50
JP2UF100-L20		2.00	50.8	23	50	64	30	13.61	50
JP4UF100-X20		4.00	101.6	103	225	250	50	22.69	10

Suitable for use in air handling spaces in accordance with Sec. 300-22(c) and (d) of the National Electrical Code. JP4 family of parts suitable for use in single unit configurations.
Listed in accordance with CAN/ULC S102.2 when mounted as single units or in pairs. Minimum spacing of 4' (1220mm) required between mount points. (Flame Spread Rating = 0, Smoke Developed Classification = 30)
‡Standard product is black in color. For red replace – L20 with – L2 in part number suffix.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Conduit Waterfall

- Easy to install conduit waterfall maintains bend radius control to provide a TIA/EIA-568-B compliant installation
- UL 94V-0 rated material
- Suitable for use in air handling spaces per UL 2043
- UL listed per UL 1565
- Able to manage and support a large capacity of cables
- Easy and fast to install reducing labor cost
- Unique design allows for use in both new and retrofit applications
- Allows user to install 3/4" TAK-TY® Cable Ties and provides a method to retain and manage the cable bundle



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
CWF400	Provides bend radius control for cables entering/exiting 4" EMT conduit. Secure to conduit without tools utilizing integral thumb screw and captive nut.	1	10

All product color is black.

Threaded Rod Cover

- Protect cable from abrasion caused by contact with threaded rod
- UL 94V-0 rated material
- Available in 18" (457mm) lengths
- Accepts 1/2" to 5/8" threaded rod
- For indoor use only



Part Number	Part Description	Material	Std. Pkg. Qty.	Std. Ctn. Qty.
TRC18FR-X8	Used to protect cabling from threaded rod. Vertical slit allows easy installation. Material meets UL 94V-0 specifications. For indoor use only. Available in 18" lengths.	Flame Retardant Polyethylene	10	100

Product color is gray. For black, order part TRC18FR-X20.

Stackable Cable Rack Spacers

- Separate and support cable and prevent pinch points between the bottom row of cable and the rung as a result of the weight of multiple cable layers applied on top of each other
- UL 94V-0 rated material
- Mount to ladder rack with standard cross section cable ties
- Maximize rack space by stacking products for maximum cable capacity
- Provide an alternative to lacing cord by allowing user to secure cable to spacer to prevent movement of cable



CRS6-X



CRS1-X



CRS4-125-X



CRS1-125-X

Part Number	Part Description	Width		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm		
CRS6-X	Six space stackable cable rack spacer. Accepts cable up to .80" diameter.	5.25	133.4	10	100
CRS1-X	One space stackable cable rack spacer. Use with CRS6 to fill width of ladder rack. Accepts cable up to .80" diameter.	1.13	28.58	10	100
CRS4-125-X	Four space stackable cable rack spacer. Accepts cable up to 1.25" diameter.	5.24	133.1	10	100
CRS1-125-X	One space stackable cable rack spacer. Use with CRS4 to fill width of ladder rack. Accepts cable up to 1.25" diameter.	1.55	39.4	10	100

All product color is black.

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Waterfall Accessories

- Product available as a kit (includes base, two wings, and cable ties) or purchased separately
- UL 94V-0 rated material
- Easy to install waterfall kit maintains bend radius control in both vertical and horizontal directions to provide a TIA/EIA-568-B compliant installation
- Base attaches to either the rung or stringer on most standard ladder racks for a variety of installations/configurations
- Modular components allow user to custom configure each location where cable management is required



CMW-KIT



CMWB



CMWW

Part Number	Part Description	Color*	Std. Pkg. Qty.	Std. Ctn. Qty.
CMW-KIT	Cable management waterfall kit. Provides bend radius control when transferring cables from standard ladder rack. Kit includes CMWB, two CMWW, and cable ties.	Black	1	10
CMWB	Cable management waterfall base. Used to maintain 1.75" bend radius control vertically when transferring cable off of ladder rack. Mounts to ladder rack rung or stringer with standard cross section cable ties (included).	Black	1	10
CMWW	Cable management waterfall wing. Used in conjunction with CMWB to maintain 1.00" bend radius control horizontally when transferring cable off ladder rack.	Black	1	10

*For white, include suffix of 10. For example: CMW-KIT10

Double Waterfall Accessory

- Double waterfall base attaches to the rung on most standard ladder racks to allow bend radius control for cables coming from either direction
- UL 94V-0 Rated Material
- Easy to install double waterfall base maintains bend radius control in a vertical direction to provide a TIA/EIA-568-B compliant installation



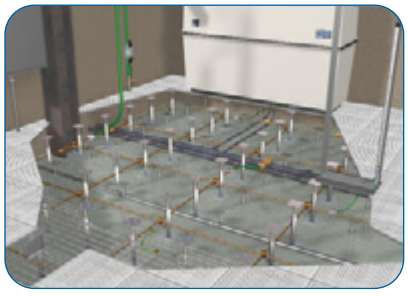
Part Number	Part Description	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
CMW2B	Cable management double waterfall base. Used to maintain 1.75" bend radius control vertically when transferring cable off of ladder rack. Mounts to ladder rack rung with standard cross section cable ties (included).	Black	1	10

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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GROUNDING AND BONDING

PANDUIT grounding and bonding solutions meet customer needs and today's critical application requirements for grounding data centers. *PANDUIT*® *STRUCTUREDGROUND*™ System for Data Center Grounding provides a high quality, visually verifiable, and dedicated grounding path to maintain system performance and protect network equipment and personnel. *PANDUIT* grounding and bonding components are designed for use on racks and cabinets which meet EIA-310-D.







- **Ensures highest network system performance**
- **Prevents equipment damage**
- **Maximizes uptime**
- **Meets TIA-942, J-STD-607-A, IEEE Std 1100™ (IEEE Emerald Book), UL and CSA**
- **Promotes personnel protection**
- **Designed for flexibility and easy installation**

STRUCTUREDGROUND™ System for Data Center Grounding components provide a low resistance grounding path for reliability; include factory terminated jumpers for easy installation; and are kitted for convenience. Jumper kits include *PAN-LUG*™ Copper Compression Connectors that meet NEBS Level 3 Criteria, the highest level of operability within the network facility environment. A full line of manual, controlled cycle, and battery operated hydraulic crimping tools meet application needs and provide lowest installed cost. For the complete line of *PAN-LUG*™ Power and Grounding Connectors and crimping tools, refer to the Electrical Solutions Catalog SA-ELCB03.

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A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

The Purpose of Grounding and Bonding



The grounding and bonding system is more than just an insurance policy against a lightning strike or other surge event. It is an active, functioning system that provides protection for personnel and equipment. Proper grounding and bonding are essential for efficient network performance in the modern data center.

A primary purpose of the grounding and bonding system is to create an adequate-capacity path for electrical surges and transient voltages to return to their source (which may include the earth). Lightning, fault currents, circuit switching (motors turning on and off), activation of surge protective devices (SPDs) and electrostatic discharge are common causes of these electrical surges and transient voltages. An effective grounding and bonding system minimizes the detrimental effects of these electrical surges and transient voltages.

A properly designed grounding and bonding system is intentional, visually verifiable, and adequately sized to handle expected currents safely and without undue effect on susceptible electronic equipment. Any metallic component that is part of the data center infrastructure (such as equipment, racks, ladder racks, cabinets, cable trays, etc.) must be properly connected to the grounding and bonding system.

What are the Effects of Improper Grounding?

Lower Reliability

- An improperly designed grounding (and bonding) system may be a primary source of interference and emission [1]
- According to the IEEE, the typical AC third-prong ground circuit is almost never sufficient to prevent damage to network equipment susceptible to ground-fault related potentials [2]
- Poorly designed or improperly applied grounding, bonding, and shielding techniques often adversely affect the performance of electronic equipment – from the circuit board to the network system [3]
- Approximately 70% of all anomalies, dysfunctions, or problems associated with power distribution systems are directly or indirectly related to bonding and grounding issues [4]

Safety Risks

- Personal injury from electric shock caused by improper grounding and bonding can cause immeasurable human suffering and significant expense
- Potential fire hazards exist when heat is generated from electrical surges that occur on a high impedance grounding and bonding path

1. Ott, Henry. *Noise Reduction Techniques in Electronic Systems.*, 2nd edition. NY: Wiley-Interscience, 1988.
2. Institute of Electrical and Electronics Engineers. IEEE Std 1100™ – 2005. *IEEE Recommended Practice for Powering and Grounding Electronic Equipment.*
3. Quoted from Doug Dorr, Senior Project Manager, EPRI and William Bush, Director of Research – Power & Grounding, *PANDUIT* Laboratories. Both serve on the IEEE P1100 committee (Emerald Book) in leadership positions and also on the IEEE SPD committee, as well as other standards organizations.
4. Quoted from S.Frank Waterer, Electrical Engineering, Fellow, at Schneider Electric with 30 years experience, Vice-Chair of IEEE/SPDC, NEMA member.

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YOU CAN AFFORD PROPER GROUNDING!

Network equipment, such as switches, routers, and storage devices, costs anywhere from thousands of dollars to hundreds of thousands of dollars. The cost of proper grounding is only a tiny fraction of the cost of the equipment it is protecting.

According to IEEE, grounding and bonding are an essential part of the infrastructure, not just a tool to achieve power quality. [2]

Clearly the cost of proper grounding and bonding is a small fraction of the larger cost of improper grounding and bonding – mainly, the inability to service customers properly.

***PANDUIT*® *STRUCTUREDGROUND*™ System for Data Center Grounding gives you what you need to properly protect your investment.**

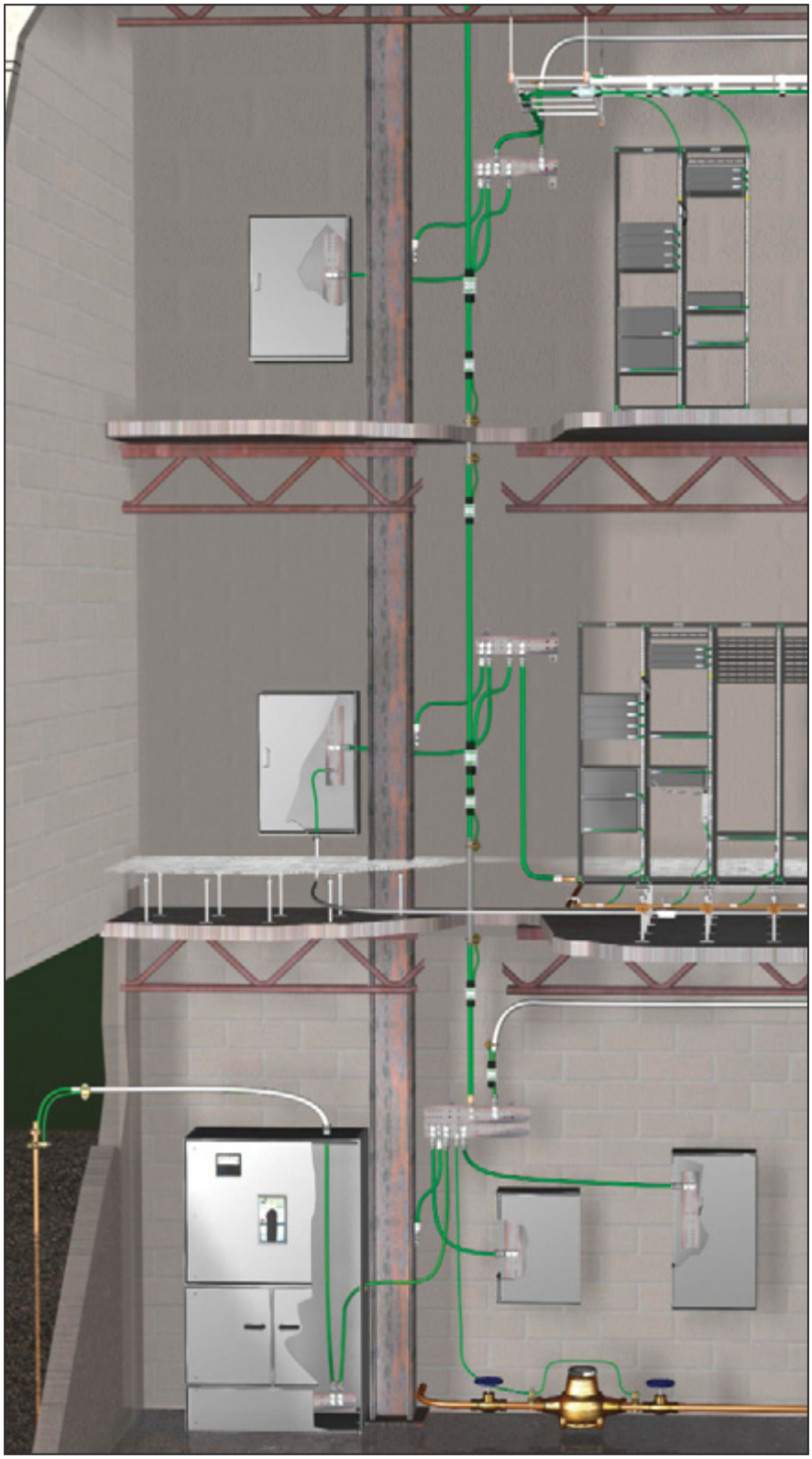
1. Ott, Henry. *Noise Reduction Techniques in Electronic Systems*., 2nd edition. NY: Wiley-Interscience, 1988.
2. Institute of Electrical and Electronics Engineers. IEEE Std 1100™ – 2005. *IEEE Recommended Practice for Powering and Grounding Electronic Equipment.*
3. Quoted from Doug Dorr, Senior Project Manager, EPRI and William Bush, Director of Research – Power & Grounding, *PANDUIT* Laboratories. Both serve on the IEEE P1100 committee (Emerald Book) in leadership positions and also on the IEEE SPD committee, as well as other standards organizations.
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C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

Common Bonding Network (CBN) Roadmap

- *PANDUIT® STRUCTUREDGROUND™* System for Data Center Grounding is a complete, highly reliable line of products to ground your building and network equipment in compliance with BICSI TDM Manual, 11th Edition and J-STD-607-A, TIA-942, IEEE Std 1100™ (IEEE Emerald Book), UL and CSA



Telecommunications Room (see roadmap on page C5.6)

Data Center (see roadmaps on pages C5.7 – C5.9)

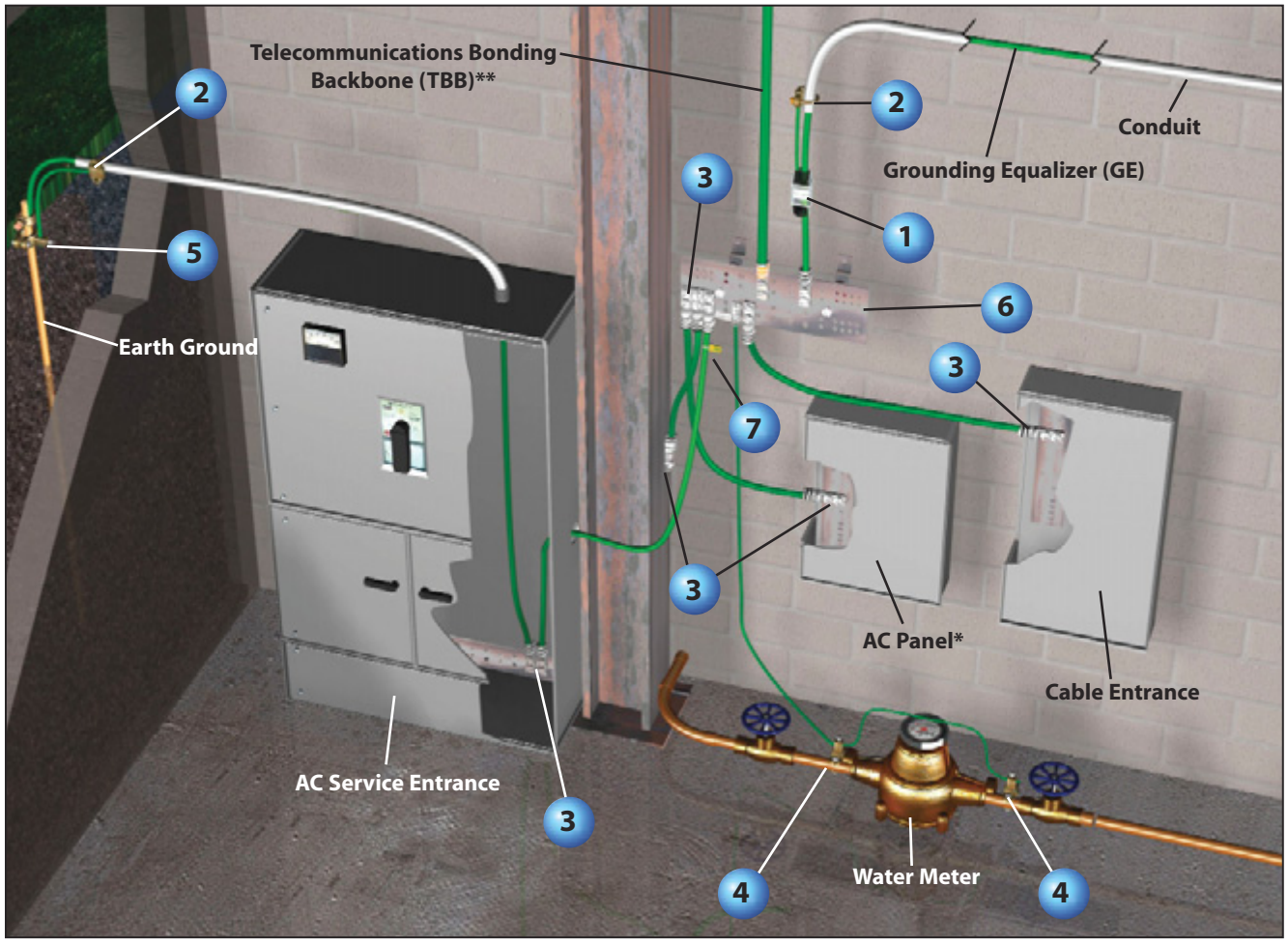
Service Entrance (see roadmap on page C5.5)

For more data center grounding information, see www.panduit.com/dcgrounding.

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Service Entrance Grounding Roadmap

- Complies with J-STD-607-A and IEEE Std 1100™ (IEEE Emerald Book)
- Grounding Equalizer (GE) is required when two or more Telecommunications Bonding Backbones (TBB) are used within a multi-story building; bond TBBs together with a GE at the top floor and at a minimum of every third floor in between



1 Copper Compression HTAP and Clear Cover: HTWC (see page C5.32)



2 Bronze, U-Bolt Grounding Clamp: GPL (see page C5.36) connected by a cable to **1** (HTAP)



3 Copper Compression, Two-Hole, Long Barrel with Window Lug: LCC-W (see pages C5.28 – C5.29)



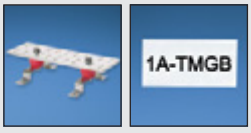
4 Bronze, Water Pipe Grounding Clamp: KP (see page C5.36)



5 Bronze, Grounding Rod Clamp: WB (see page C5.37) connected by a cable to **2** (U-Bolt Grounding Clamp)



6 Telecommunications Main Grounding Busbar (TMGB) and Busbar Label (see page C5.24)



7 Telecommunications Grounding and Bonding Conductor Label Kit: LTYK (see page C5.25)



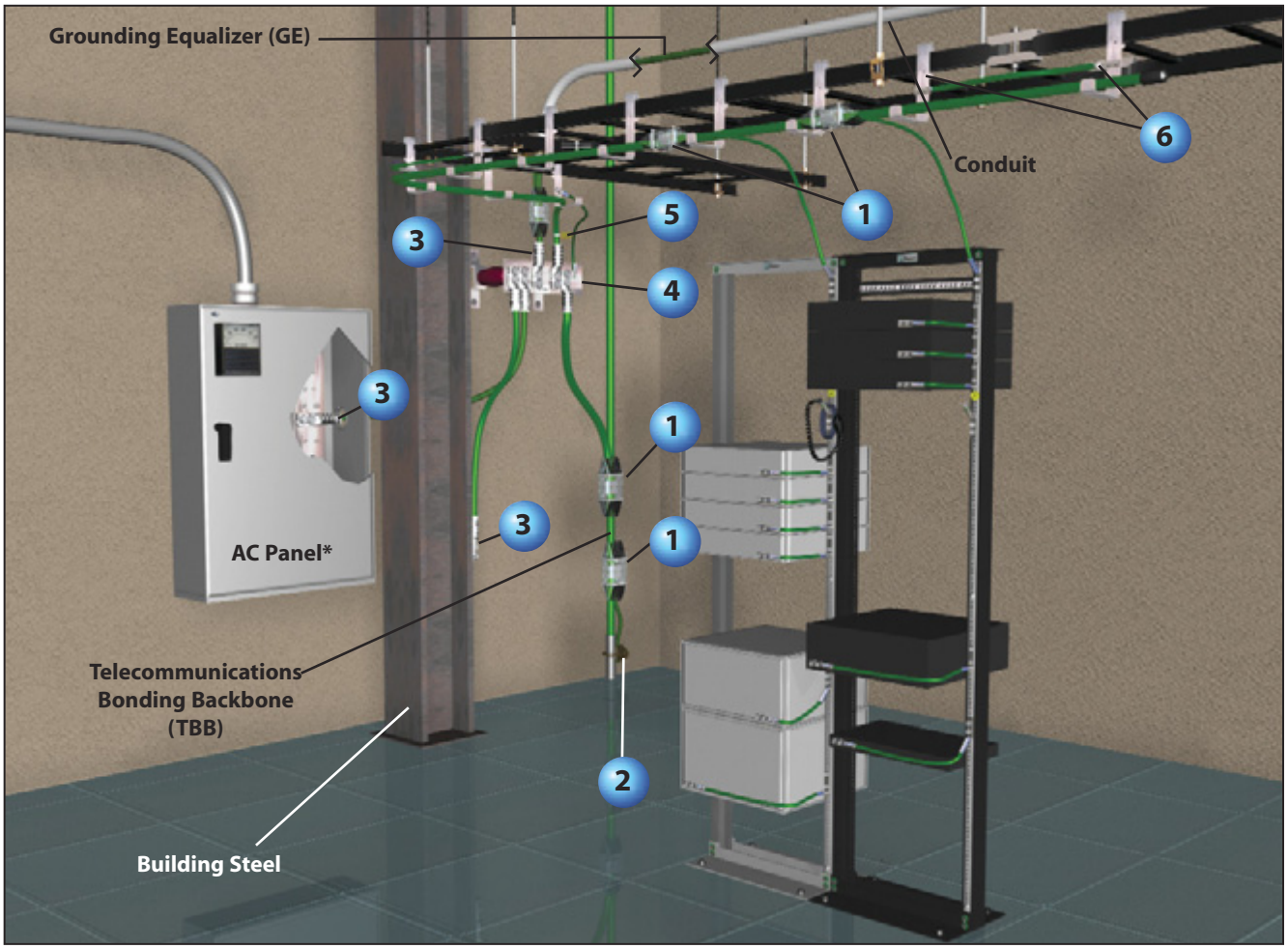
*AC Panel should be grounded per NEC standards. Enclosure should be grounded per manufacturer's specifications.
**Specification J-STD-607-A specifies different size conductors based on the length of the Telecommunications Bonding Backbone (TBB).

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Telecommunications Room Grounding Roadmap

- Complies with BICSI TDM Manual, 11th Edition and J-STD-607-A, TIA-942, IEEE Std 1100™ (IEEE Emerald Book), UL and CSA
- Bonding hardware is recommended to mount all panels, equipment, shelves, etc. to ensure electrical continuity between metallic components and the grounded rack or cabinet
- Can be used to ground equipment mounted in cabinets which meet EIA-310-D; installer should bond all cabinet members to the grounding strip

Back of Racks Shown



1 **Copper Compression HTAP and Clear Cover: HTWC (see page C5.32)**



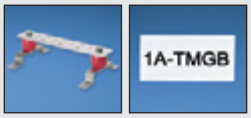
2 **Bronze, U-Bolt Grounding Clamp: GPL (see page C5.36)**



3 **Copper Compression, Two-Hole, Long Barrel with Window Lug: LCC-W (see pages C5.28 – C5.29)**



4 **Telecommunications Grounding Busbar (TGB) and Busbar Label (see page C5.24)**



5 **Telecommunications Grounding and Bonding Conductor Label Kit: LTYK (see page C5.25)**



6 **Auxiliary Cable Bracket: GACB (see page C5.26)**



Conductor insulation is the international standard of green-and-yellow as specified by CENELEC in EN 60950-1



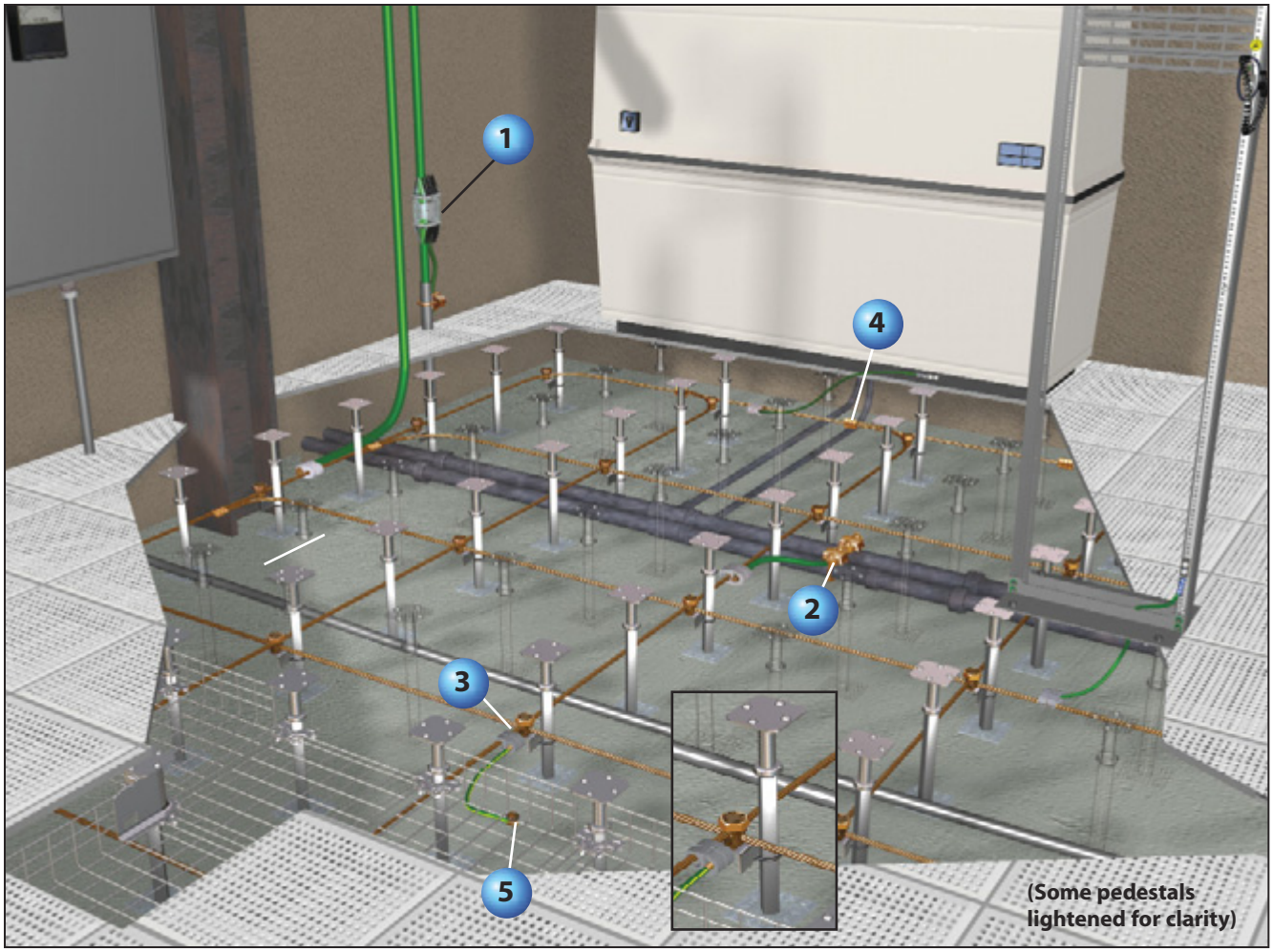
*AC Panel should be grounded per NEC standards. Enclosure should be grounded per manufacturer's specifications.

A typical overhead cabling system includes a multitude of metallic components which are connected together. It is the responsibility of the installer to insure all of the metallic components are bonded, which means that they are connected together electrically in accordance with applicable specifications. The *PANDUIT* Bonding/Grounding System does not insure required bonding of the overhead cabling system metallic components.

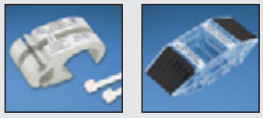
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Access Floor Mesh Common Bonding Network (MCBN) Roadmap

- Complies with BICSI TDM Manual, 11th Edition and J-STD-607-A, TIA-942, IEEE Std 1100™ (IEEE Emerald Book), UL and CSA
- MCBN for access floor deployment is recommended in a grid design on 4 foot intervals, allowing for bonding of every other access floor pedestal; this design enables the bonding of at least one pedestal from each access floor tile directly to the MCBN network
- Bond all metallic elements to the MCBN, including rack/cabinet grounding jumpers, wire basket, water pipes and air conditioning units



1 **Copper Compression HTAP and Clear Cover: HTWC** **(see page C5.32)**



2 **Bronze, U-Bolt Grounding Clamp: GPL** **(see page C5.36)**



3 **Access Floor Grounding Clamp: GPQC** **(see page C5.25)**



4 **Code Conductor, Thin Wall, CTAP: CTAPF** **(see page C5.35)**



5 **Split Bolt, Copper: SBC** **(see page C5.37)**

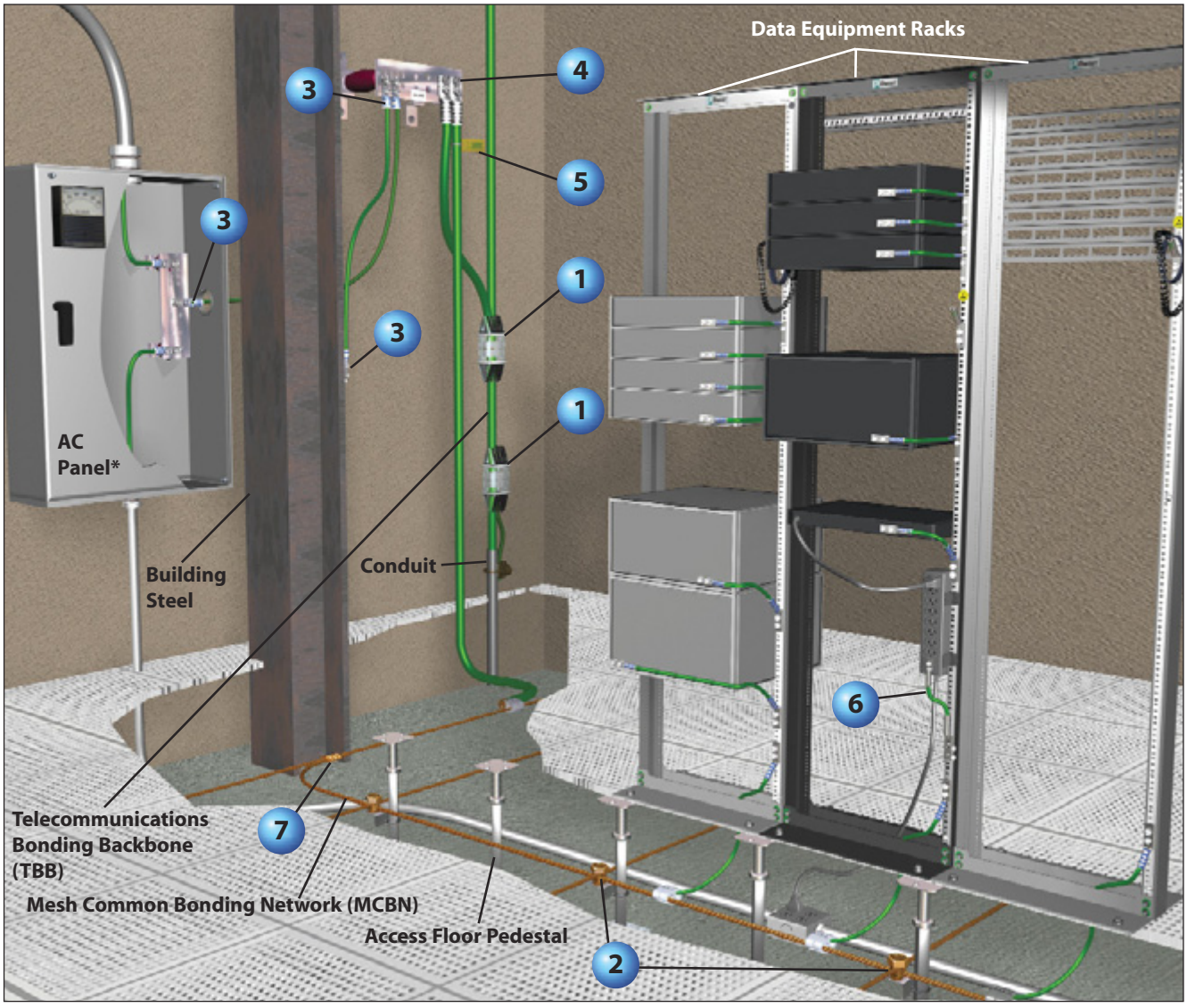


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Data Center Rack and Cabinet Grounding Roadmap

- Complies with BICSI TDM Manual, 11th Edition and J-STD-607-A, TIA-942, IEEE Std 1100™ (IEEE Emerald Book), UL and CSA
- Bonding hardware is recommended to mount all panels, equipment, shelves, etc. to ensure electrical continuity between metallic components and the grounded rack or cabinet
- Designed for use on racks and cabinets which meet EIA-310-D, see pages C4.1 – C4.38 for the *PANDUIT* cabinets, racks, and cable management offering

Back of Racks Shown



1 **Copper Compression HTAP and Clear Cover: HTWC (see page C5.32)**



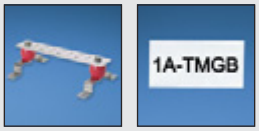
3 **Copper Compression, Two-Hole, Long Barrel with Window Lug: LCC-W (see pages C5.28 – C5.29)**



2 **Access Floor Grounding Clamp: GPQC (see page C5.25)**



4 **Telecommunications Grounding Busbar (TGB) and Busbar Label (see page C5.24)**



*AC Panel should be grounded per NEC standards. Enclosure should be grounded per manufacturer's specifications.

A typical access floor includes a multitude of metallic components which are connected together. It is the responsibility of the manufacturer and installer of the access floor to insure all the access floor metallic components are bonded which means that they are connected together electrically in accordance with applicable specifications. The *PANDUIT* Bonding/Grounding System does not insure required bonding of the access floor metallic components.

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Back of Cabinets Shown



5 **Telecommunications Grounding and Bonding Conductor Label Kit: LTYK**
(see page C5.25)



7 **Code Conductor, Thin Wall, CTAP: CTAPF**
(see page C5.35)



6 **Surge Suppressor Jumper Kit: SSGK**
(see page C5.19)



Conductor insulation is the international standard of green-and-yellow as specified by CENELEC in EN 60950-1



*AC Panel should be grounded per NEC standards. Enclosure should be grounded per manufacturer's specifications.
A typical access floor includes a multitude of metallic components which are connected together. It is the responsibility of the manufacturer and installer of the access floor to insure all the access floor metallic components are bonded which means that they are connected together electrically in accordance with applicable specifications. The *PANDUIT* Bonding/Grounding System does not insure required bonding of the access floor metallic components.

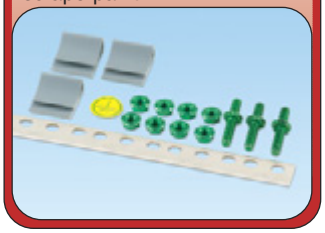
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Selection Guide – *STRUCTUREDGROUND*™ Kits for Cabinets

- Complies with the "Telecommunications Infrastructure Standard for Data Centers" as described in TIA-942
- Maximizes uptime, maintains system performance, and protects network equipment
- Provides a dedicated, low resistance, and visually verifiable ground system
- Flexible design for use on EIA-310-D compliant cabinets

Typical Cage Nut Application
Back of Cabinet Shown
(Sides/Doors Removed for Clarity)
Kits for threaded and thru-hole also available

Grounding Strip Kit: RGS (Page C5.16)
Patent pending hardware provides a bond between grounding strip and cabinet, eliminating the need to scrape paint



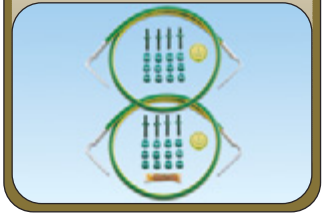
Equipment Jumper Kit: RGEJ (Page C5.18)
Bonds network equipment to the grounding strip or grounding busbar

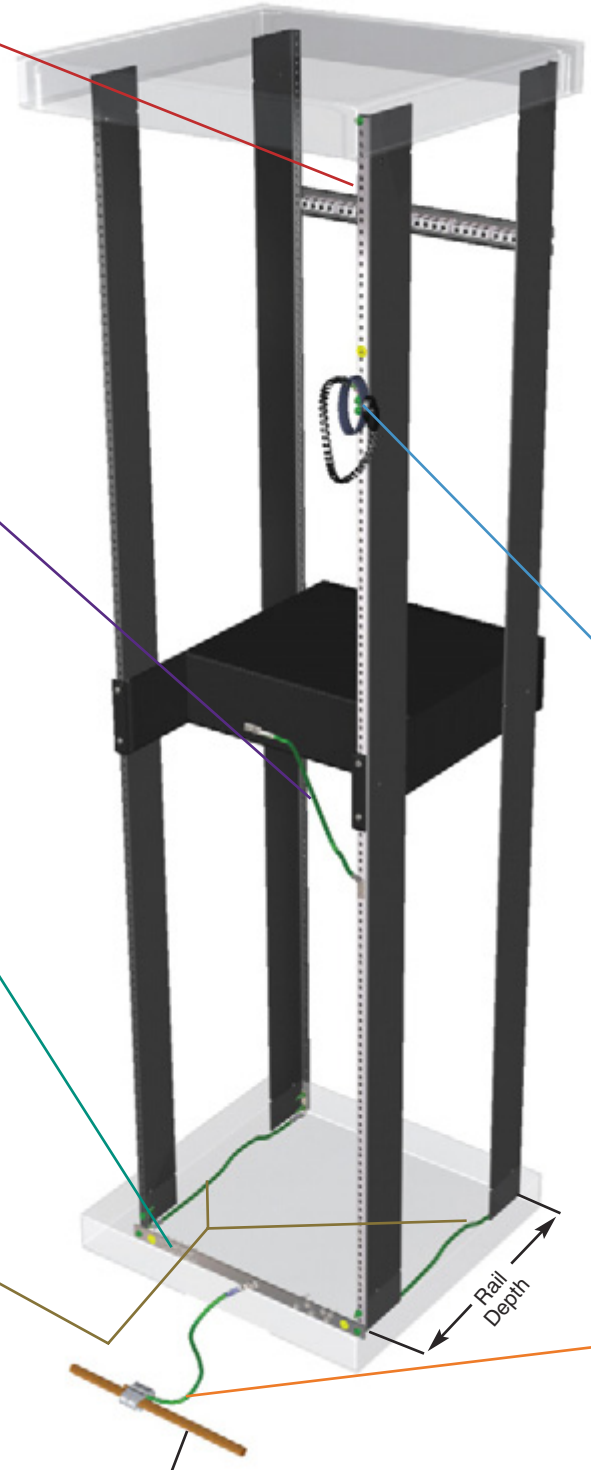


Grounding Busbar Kit: RGRB (Page C5.17)
Provides the common grounding point within the cabinet



Front to Back Rail Jumper Kit: CGJ (Page C5.17)
Patent pending hardware bonds the front and back cabinet rails to the cabinet grounding busbar





Cage Nut Bonding Stud: CGNBSK (Page C5.21)
Patent pending, bonds equipment and patch panels to cabinet rails



Electrostatic Discharge (ESD) Port Kit: RGESD (Page C5.20)
Bent 45° acts as a hook to hold ESD wrist strap



Common Bonding Network (CBN) Jumper Kit: RGCBNJ (Page C5.16)
Connects grounding busbar to MCBN in access floor and overhead grounding applications



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Selection Guide – *StructuredGround*™ Kits for Cabinets (continued)

Cabinet Grounding Selection in 2 Easy Steps:

1. What type of fasteners do your mounting rails require?
2. What is the maximum depth of the equipment being mounted?

Selection Criteria		Grounding Strip Kit^■	ESD Port Kit (2 required)‡	Grounding Busbar Kit^	Front to Back Rail Jumper Kit^	Common Bonding Network (CBN) Jumper Kit*	Equipment Jumper Kit**	Bonding Hardware***
***PANDUIT*® *Net-Access*™ Cabinets: CN1, CN2, CN4**		***StructuredGround*™ Kits for Data Center Cabinet Grounding**						
Rail Fasteners								
Threaded #12-24•		**RGS134-1Y**	**RGESD2-1**	—	—	**RGCBNJ660P22**	**RGEJ657PFY**	**RGTBSG-C** (Bonding Screw)
Cage Nut••		**RGS134B-1**	**RGESD2B-1**					**CGNBSK** (Bonding Stud)
EIA-310-D Compliant Cabinets		***StructuredGround*™ Kits for Data Center Cabinet Grounding**						
1. Rail Fasteners	**2. Rail Depth up to**							
Threaded #12-24 or M6	20" (.5M)	**RGS134-1Y**	**RGESD2-1**	**RGRB19U**	**CGJ620U**	**RGCBNJ660P22**	**RGEJ657PFY**	**RGTBSG-C** or **RGTBSM6G-C**
	30" (.75M)				**CGJ630U**			
	40" (1M)				**CGJ640U**			
Threaded #10-32 or M5	20" (.5M)		**RGESD2A-1**		**CGJ620UA**			**RGTBS1032G-C** or **RGTBSM5G-C**
	30" (.75M)				**CGJ630UA**			
	40" (1M)				**CGJ640UA**			
Cage Nut	20" (.5M)	**RGS134B-1**	**RGESD2B-1**	**RGRB19CN**	**CGJ620UB**			**CGNBSK** (Bonding Stud)
	30" (.75M)				**CGJ630UB**			
	40" (1M)				**CGJ640UB**			
1/4" Thru-hole	20" (.5M)	**RGS134C-1**	**RGESD2C-1**	**RGRB19U**	**CGJ620UC**			**THBSK** (Bonding Stud)
	30" (.75M)				**CGJ630UC**			
	40" (1M)				**CGJ640UC**			

^Grounding strip kits, grounding busbar kits, and front to back rail jumper kits are supplied with mounting hardware based upon rail type.
■Grounding strip kits include 45 RU strip lengths, additional kits for 42 RU and 47 RU also available. Grounding strip kits also available in packages of ten.
‡ESD port recommended for use on front and back of cabinet.
*CBN jumper kit supports MCBN connection up to #2 AWG (35mm²). Use RGCBNJ660PY for cable sizes up to 250kcmil (120mm²).
**Additional equipment jumper kits available in different sizes with different termination options, refer to page C5.18. One equipment jumper kit is required per component.
***Use bonding hardware to mount and bond equipment to the cabinet.
•Threaded #12-24 rails are included with the CN1, CN2, and CN4 cabinets.
••Cage nut equipment rails are sold in pairs for the cabinets, order part number CNRC.

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Selection Guide – *STRUCTUREDGROUND*™ Kits for Racks

- Complies with the "Telecommunications Infrastructure Standard for Data Centers" as described in TIA-942
- Maximizes uptime, maintains system performance, and protects network equipment
- Provides a dedicated, low resistance, and visually verifiable ground system
- Flexible design for use on EIA-310-D compliant racks

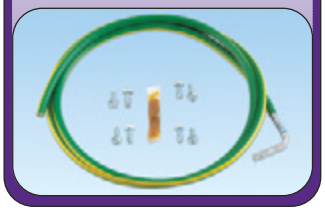
New Installation
Typical Threaded Application
Back of Rack Shown
Kits for cage nut and thru-hole also available



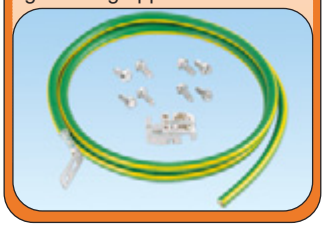
Paint Piercing Grounding Washer Kit: RGW (Page C5.21)
Provides a superior bond between frame members, serrations eliminate the need to scrape paint



Equipment Jumper Kit: RGEJ (Page C5.18)
Bonds network equipment to the grounding strip or grounding busbar



Common Bonding Network (CBN) Jumper Kit: RGCBNJ (Page C5.16)
Connects grounding strip or grounding busbar to MCBN in access floor and overhead grounding applications



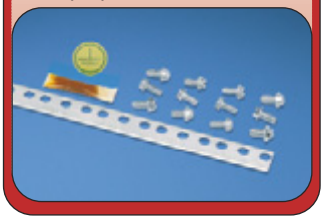
Bonding Screw: RGTBS (Page C5.20)
Patent pending, bonds equipment and patch panels to the front of the rack; standard pack includes 100 pieces



Electrostatic Discharge (ESD) Port Kit: RGESD (Page C5.20)
Bent 45° acts as a hook to hold ESD wrist strap



Grounding Strip Kit: RGS (Pg. C5.16)
Patent pending hardware provides a bond between grounding strip and rack, eliminating the need to scrape paint



Mesh Common Bonding Network (MCBN)

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Selection Guide – *StructuredGround*™ Kits for Racks (continued)

For *PANDUIT* racks:
Simply find your rack part number and follow across.

For other EIA-310-D compliant racks, follow these two easy steps:

1. What type of installation do you have?
2. What type of fasteners do your mounting rails require?

Selection Criteria	Grounding Strip Kit	ESD Port Kit (2 required)*	Grounding Busbar Kit	Common Bonding Network (CBN) Jumper Kit	Equipment Jumper Kit**	Bonding Hardware***	Paint Piercing Grounding Washer Kit
***PANDUIT* Racks**	***StructuredGround*™ Kits for Data Center Rack Grounding**						
2 Post Racks							
CMR19X84, CMR19X47, CMR19X84S New Installation	**RGS134-1Y**	**RGESD2-1**	—	**RGCBNJ660P22**	**RGEJ657PFY**	**RGTBSG-C** (#12-24)	Paint piercing grounding washers included with racks.
CMR19X84, CMR19X47, CMR19X84S Retrofit Installation	—		**RGRB19U**		**RGREJ696Y**		
			RGRKCBNJY				
NFR84 New Installation		(1 each) **RGESD-1Y** and **RGESD2-1**	**RGRB19U**	**RGCBNJ660P22**			
NFR84 Retrofit Installation							
4 Post Racks							
CMR4P84, CMR4P96 New Installation	**RGS134-1Y**	**RGESD2-1**	—	**RGCBNJ660P22**	**RGEJ657PFY**	**RGTBSG-C**	Paint piercing grounding washers included with racks.
CMR4P84, CMR4P96 Retrofit Installation	—		**RGRB19U**		**RGREJ696Y**		
CMR4P84CN, CMR4P96CN New Installation	**RGS134B-1**	**RGESD2B-1**	—		**RGEJ657PFY**	**CGNBSK**	
CMR4P84CN, CMR4P96CN Retrofit Installation	—		**RGRB19CN**		**RGREJ696Y**		
EIA-310-D Compliant Racks	***StructuredGround*™ Kits for Data Center Rack Grounding**						
1. Installation / **2. Rail Fasteners**							
New Installation 45 RU — Threaded #12-24 or M6	**RGS134-1Y**	**RGESD2-1**	—	**RGCBNJ660P22**	**RGEJ657PFY**	**RGTBSG-C** (#12-24) or **RGTBSM6G-C** (M6)	**RGW-100-1Y**
New Installation 45 RU — Threaded #10-32 or M5		**RGESD2A-1**	—			**RGTBS1032G-C** (#10-32) or **RGTBSM5G-C** (M5)	
Retrofit Installation 19" wide — Threaded #12-24 or M6	—	**RGESD2-1**	**RGRB19U**	**RGCBNJ660P22**	**RGREJ696Y**	**RGTBSG-C** (#12-24) or **RGTBSM6G-C** (M6)	—
			RGRKCBNJY				
Retrofit Installation 19" wide — Threaded #10-32 or M5	—	**RGESD2A-1**	**RGRB19U**	**RGCBNJ660P22**		**RGTBS1032G-C** (#10-32) or **RGTBSM5G-C** (M5)	
			RGRKCBNJY				

The paint piercing grounding washers work with 3/8" (M8) hardware, for all other sizes, use the grounding solution for retrofit installations.
*ESD port recommended for use on front and back of rack.
**Additional equipment jumper kits available in different sizes with different termination options, refer to page C5.18. One equipment jumper kit is required per component.
***Use bonding hardware to mount and bond equipment to the rack.

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Features and Benefits – *STRUCTUREDGROUND*™ Kits for Cabinets

PANDUIT offers a variety of kits with premium components engineered specifically to meet TIA-942 for reliable cabinet grounding.

- Provides a dedicated, low resistance, and visually verifiable ground system to maximize uptime, maintain data center system performance, and protect network equipment and personnel
- Incorporates a flexible design that can be used with cabinets which meet EIA-310-D
- Offers ease of installation – no paint scraping required to bond cabinets; factory terminated jumpers simply bolt in place



A **Bonding Studs** include patent pending paint piercing serrations to create a bond point between the cabinet rail, strip, busbar and lug; equipment can be installed at any time without removal of stud



B **Grounding Strip** is made from high conductivity wrought copper and tin plated to inhibit corrosion, providing the lowest resistance path to ground



C **Reverse Bent Lugs** are factory terminated on front to back rail jumper kits to bond the front and back cabinet rails; innovative design maximizes space by utilizing only one RU



D **Grounding Busbar** is made from high conductivity, low resistance wrought copper and tin plated to inhibit corrosion



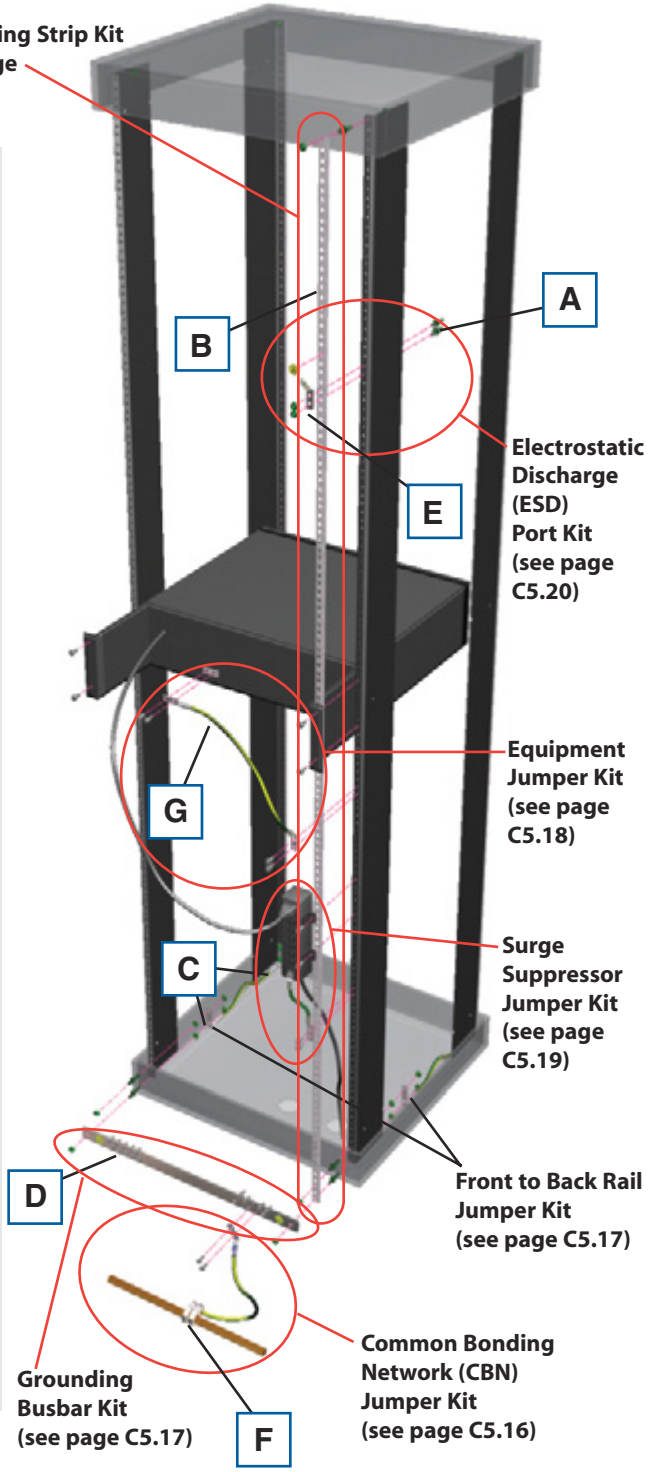
E **Electrostatic Discharge (ESD) Port** is made from high conductivity, low resistance copper and tin plated to inhibit corrosion plus it functions as an ESD wrist strap hanger



F **Copper Compression HTAP** is UL Listed and CSA Certified; used to make a highly reliable, permanent bond between the mesh common bonding network and common bonding network (CBN) jumper kit



G **Jumper** has UL, VW-1 flame rated green-and-yellow insulation and is factory terminated with copper compression, two-hole, long barrel with window lug; lug is UL Listed, CSA Certified and meets NEBS Level 3



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Features and Benefits – *STRUCTUREDGROUND*™ Kits for Racks

PANDUIT offers a variety of kits with premium components engineered specifically to meet TIA-942 for reliable rack grounding.

- Provides a dedicated, low resistance, and visually verifiable ground system to maximize uptime, maintain data center system performance, and protect network equipment and personnel
- Incorporates a flexible design that can be used with racks which meet EIA-310-D
- Offers ease of installation – no paint scraping required to bond racks; factory terminated jumpers simply bolt in place



A **Paint Piercing Grounding Washer** is made from hardened steel and electro zinc plated which inhibits corrosion to provide a superior bond between frame members on bolt-together racks



B **Grounding Strip** is made from high conductivity wrought copper and tin plated to inhibit corrosion, providing the lowest resistance path to ground



C **Thread-Forming Screws** are made from electro zinc plated steel and provide a bond to the rack by removing paint from threaded holes without creating metal shavings



D **Electrostatic Discharge (ESD) Port** is made from high conductivity, low resistance copper and tin plated to inhibit corrosion plus it functions as an ESD wrist strap hanger



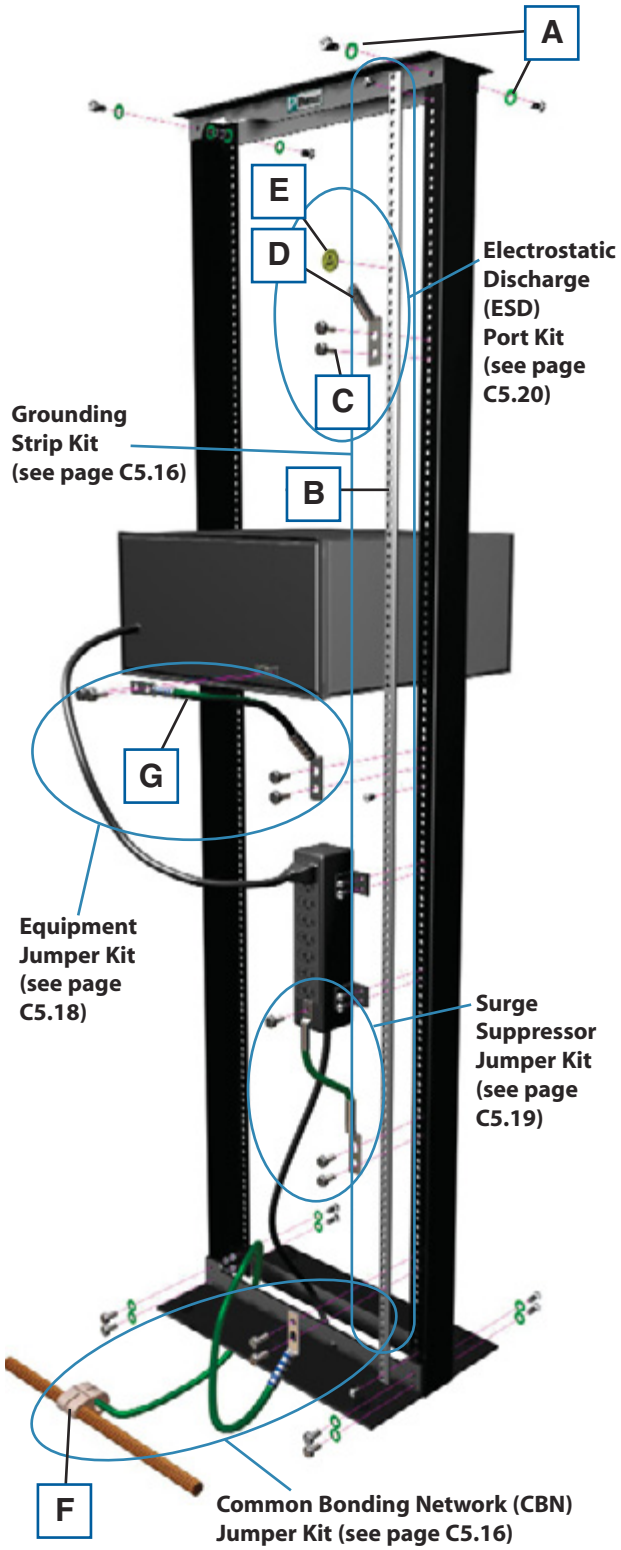
E **Electrostatic Discharge (ESD) Protection Sticker** is provided in black and yellow for high visibility and easy identification as an ESD port



F **Copper Compression HTAP** is UL Listed and CSA Certified; used to make a highly reliable, permanent bond between the mesh common bonding network and common bonding network (CBN) jumper kit



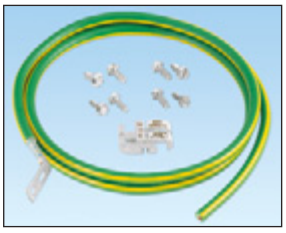
G **Jumper** has UL, VW-1 flame rated green-and-yellow insulation and is factory terminated with copper compression, two-hole, long barrel with window lug; lug is UL Listed, CSA Certified and meets NEBS Level 3 with a single stud hole and slot which allows mounting for 1/2" to 5/8" hole spacing and accommodates stud sizes 1/4", #12, and 6mm



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Common Bonding Network (CBN) Jumper Kits

- Bonds the rack or cabinet to the MCBN
- HTAPs, included in kits, require crimping tool and die; see the CT-930 crimping tool on page C5.39, the CT-2931 and CT-2931/E crimping tools on page C5.40 and the CD-930H-250 crimping die on page C5.41
- HTAPs are UL Listed and CSA Certified for applications up to 600 V when crimped with *PANDUIT* and specified competitor crimping tools and *PANDUIT* crimping dies
- Engineered to comply with US and International grounding requirements

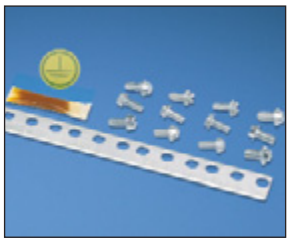


	Part Number	MCBN Conductor Size	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
NEW!	RGCBNJ660P22	HTCT2-2-1 #6 – #2 AWG (16 – 25mm²)	#6 AWG (16mm²) jumper; 60" (1.52m) length; 45° bent lug on grounding strip side; provided with .16 oz. (5cc) of antioxidant, two each #12-24 x 1/2", M6 x 12mm, #10-32 x 1/2" and M5 x 12mm thread-forming screws and a copper compression HTAP* for connecting to the MCBN.	1	10
	RGCBNJ660PY	HTCT250-2-1 #2 AWG – 250 kcmil (35 – 120mm²)		1	10

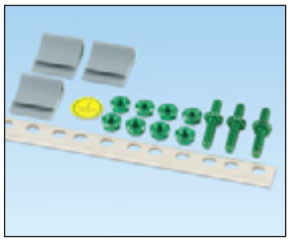
*HTAPs also sold separately, see page C5.33.

Grounding Strip Kits

- Bonds up to 45 RU per rack
- EIA Universal mounting hole pattern
- Engineered to comply with US and International grounding requirements



Threaded



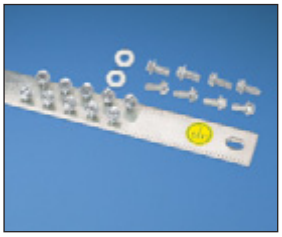
Cage Nut/1/4" Thru-Hole

	Part Number	Part Description	Std. Pkg. Qty.
	Grounding Strip Kits for Threaded Rail Fasteners		
	RGS134-1Y	Grounding strip; 78.65" (2m) length; .67" (17mm) width; .05" (1.27mm) thickness; provided with .16 oz. (5cc) of antioxidant, one grounding sticker and three each #12-24 x 1/2", M6 x 12mm, #10-32 x 1/2" and M5 x 12mm thread-forming screws.	1
	RGS134-10-1Y	Ten grounding strips; 78.65" (2m) length; .67" (17mm) width; .05" (1.27mm) thickness; provided with .16 oz. (5cc) of antioxidant, ten grounding stickers and 30 each #12-24 x 1/2" and M6 x 12mm thread-forming screws.	1
	RGS134A-10-1	Ten grounding strips; 78.65" (2m) length; .67" (17mm) width; .05" (1.27mm) thickness; provided with .16 oz. (5cc) of antioxidant, ten grounding stickers and 30 each #10-32 x 1/2" and M5 x 12mm thread-forming screws.	1
	Grounding Strip Kits for Cage Nut Rail Fasteners		
NEW!	RGS134B-1	Grounding strip; 78.65" (2m) length; .67" (17mm) width; .05" (1.27mm) thickness; provided with .16 oz. (5cc) of antioxidant, one grounding sticker, three cage nut bonding studs, eight #12-24 bonding nuts and three strip clips.	1
NEW!	RGS134B-10-1	Ten grounding strips; 78.65" (2m) length; .67" (17mm) width; .05" (1.27mm) thickness; provided with .16 oz. (5cc) of antioxidant, ten grounding stickers, 30 cage nut bonding studs, 80 #12-24 bonding nuts and 30 strip clips.	1
	Grounding Strip Kits for 1/4" Thru-Hole Rail Fasteners		
NEW!	RGS134C-1	Grounding strip; 78.65" (2m) length; .67" (17mm) width; .05" (1.27mm) thickness; provided with .16 oz. (5cc) of antioxidant, one grounding sticker, three thru-hole bonding studs and eight bonding nuts.	1
NEW!	RGS134C-10-1	Ten grounding strips; 78.65" (2m) length; .67" (17mm) width; .05" (1.27mm) thickness; provided with .16 oz. (5cc) of antioxidant, ten grounding stickers, 30 thru-hole bonding studs and 80 bonding nuts.	1

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Grounding Busbar Kit

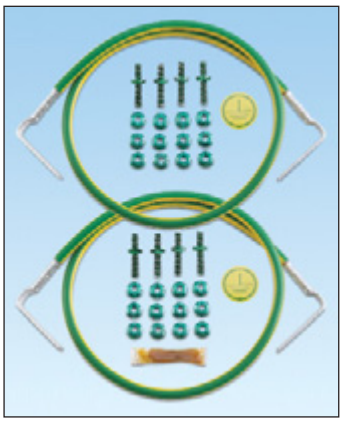
- Provides the common grounding point within the cabinet
- Optimized for installation on 19" racks or cabinets that meet EIA-310-D
- Can be positioned anywhere on the rack or cabinet
- Available pre-assembled with twenty mounting screws for quick and easy installation
- Engineered to comply with US and International grounding requirements



	Part Number	Part Description	Std. Pkg. Qty.
Grounding Busbar Kits for Threaded Rail Fasteners			
NEW!	RGRB19Y	Grounding busbar; 19" (483mm) length; tin plated; fourteen holes arranged for flexibility in mounting; provided with two each #12-24 x 1/2" and M6 x 12mm thread-forming screws.	1
	RGRB19U	Grounding busbar; 19" (483mm) length; tin plated; twenty holes arranged for flexibility in mounting with twenty #12-24 x 1/2" hex head screws installed; mounting hole sets have 5/8" (15.9mm) spacing; provided with two each #12-24 x 1/2", M6 x 12mm, #10-32 x 1/2" and M5 x 12mm thread-forming screws and two #12 flat washers for mounting.	1
Grounding Busbar Kit for Cage Nut Rail Fasteners			
NEW!	RGRB19CN	Grounding busbar; 19" (483mm) length; tin plated; twenty holes arranged for flexibility in mounting with twenty #12-24 x 1/2" hex head screws installed; mounting hole sets have 5/8" (15.9mm) spacing; provided with two cage nut bonding studs and four #12-24 bonding nuts.	1

Front to Back Rail Jumper Kits

- Bonds the front and back cabinet rails to the cabinet grounding busbar
- Patent pending hardware incorporates paint piercing serrations to create a bond point between the cabinet rail and lug; hardware never needs to be removed for new equipment installations
- Both ends are factory terminated with reverse bent lugs that save space, confining the connection to one RU
- Available in three lengths, 20", 30", and 40" to satisfy a wide range of cabinet rail depths
- Engineered to comply with US and International grounding requirements

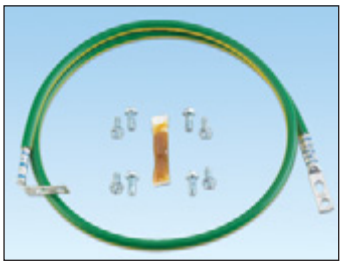


Part Number	Length In. (m)	Part Description	Std. Pkg. Qty.
Front to Back Rail Jumper Kits for #12-24 or M6 Rail Fasteners			
CGJ620U	20 (.50)	Two #6 AWG (16mm²) jumpers; factory terminated on both ends with 90° reverse bent lugs; provided with .16 oz. (5cc) of antioxidant, two grounding stickers, eight each #12-24 and M6 bonding studs and sixteen each #12-24 and M6 bonding nuts.	1
CGJ630U	30 (.75)		1
CGJ640U	40 (1)		1
Front to Back Rail Jumper Kits for #10-32 or M5 Rail Fasteners			
CGJ620UA	20 (.50)	Two #6 AWG (16mm²) jumpers; factory terminated on both ends with 90° reverse bent lugs; provided with .16 oz. (5cc) of antioxidant, two grounding stickers, eight each #10-32 and M5 bonding studs and sixteen each #10-32 and M5 bonding nuts.	1
CGJ630UA	30 (.75)		1
CGJ640UA	40 (1)		1
Front to Back Rail Jumper Kits for Cage Nut Rail Fasteners			
CGJ620UB	20 (.50)	Two #6 AWG (16mm²) jumpers; factory terminated on both ends with 90° reverse bent lugs; provided with .16 oz. (5cc) of antioxidant, two grounding stickers, eight cage nut bonding studs and 24 #12-24 bonding nuts.	1
CGJ630UB	30 (.75)		1
CGJ640UB	40 (1)		1
Front to Back Rail Jumper Kits for 1/4" Thru-Hole Rail Fasteners			
CGJ620UC	20 (.50)	Two #6 AWG (16mm²) jumpers; factory terminated on both ends with 90° reverse bent lugs; provided with .16 oz. (5cc) of antioxidant, two grounding stickers, eight thru-hole bonding studs and 24 #12-24 bonding nuts.	1
CGJ630UC	30 (.75)		1
CGJ640UC	40 (1)		1

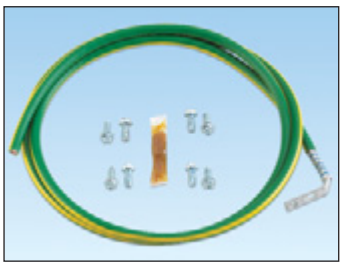
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Equipment Jumper Kits

- Bonds network equipment to grounding strip or grounding busbar
- Jumper kit available with both ends factory terminated to provide a bolt-on solution
- Jumper kit available with one end factory terminated to attach to the grounding strip or grounding busbar; free end accommodates unique equipment terminations
- Use jumpers with 90° bent lug, on grounding strip side, for high density grounding requirements up to one ground point per RU
- Use jumpers with 45° bent lugs, on grounding strip side, for improved cable management
- Use 24" jumpers when network equipment ground point is located near the grounding strip side of the rack or cabinet
- Use 36" jumpers when network equipment ground point is located away from the grounding strip side of the rack
- Engineered to comply with US and International grounding requirements



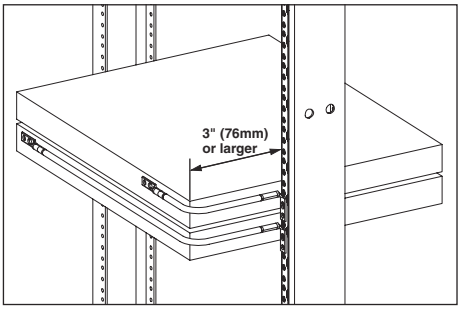
RGEJ1024PFY



RGEJ1057PFY

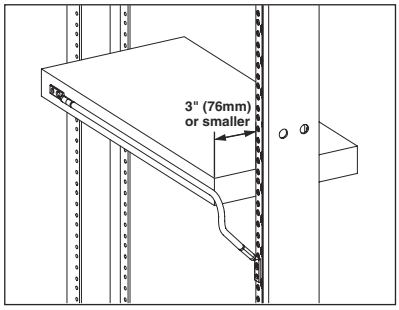
Part Number	Length In. (m)	Angle	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
#10 AWG (6mm²) Equipment Jumpers Factory Terminated on Both Ends					
RGEJ1024PHY	24 (.61)	45°	#10 AWG (6mm²) jumper; bent lug on grounding strip side to straight lug on equipment; provided with .16 oz. (5cc) of antioxidant and two each #12-24 x 1/2", M6 x 12mm, #10-32 x 1/2" and M5 x 12mm thread-forming screws.	1	10
RGEJ1024PFY	24 (.61)	90°		1	10
RGEJ1036PFY	36 (.91)	90°		1	10
#6 AWG (16mm²) Equipment Jumpers Factory Terminated on Both Ends					
RGEJ624PHY	24 (.61)	45°	#6 AWG (16mm²) jumper; bent lug on grounding strip side to straight lug on equipment; provided with .16 oz. (5cc) of antioxidant and two each #12-24 x 1/2", M6 x 12mm, #10-32 x 1/2" and M5 x 12mm thread-forming screws.	1	10
RGEJ624PFY	24 (.61)	90°		1	10
RGEJ636PFY	36 (.91)	90°		1	10
#10 AWG (6mm²) Equipment Jumper Factory Terminated on One End					
RGEJ1057PFY	57 (1.45)	90°	#10 AWG (6mm²) jumper; bent lug on grounding strip side; provided with .16 oz. (5cc) of antioxidant and two each #12-24 x 1/2", M6 x 12mm, #10-32 x 1/2" and M5 x 12mm thread-forming screws.	1	10
#6 AWG (16mm²) Equipment Jumper Factory Terminated on One End					
RGEJ657PFY	57 (1.45)	90°	#6 AWG (16mm²) jumper; bent lug on grounding strip side; provided with .16 oz. (5cc) of antioxidant and two each #12-24 x 1/2", M6 x 12mm, #10-32 x 1/2" and M5 x 12mm thread-forming screws.	1	10

How to Select the Appropriate Equipment Jumper



Select 24" (.61m) equipment jumpers with 90° lugs when equipment grounding connection is close to the grounding strip.

Select 36" (.91m) equipment jumpers with 90° lugs when equipment grounding connection is on the opposite side from the grounding strip.

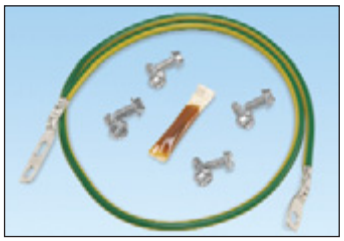


Select equipment jumpers with 45° lugs for lower density applications or shallow depth equipment to provide improved cable management.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Surge Suppressor Jumper Kit

- Bonds power or data line surge suppressor to grounding strip or grounding busbar
- Both ends factory terminated to provide a bolt-on solution
- Engineered to comply with US and International grounding requirements



Part Number	Part Description	Std. Pkg. Qty.
SSGK-1	#10 AWG (6mm²) jumper; 24" (.61m) length; factory terminated on both ends; one-hole lug on surge suppressor to two-hole lug on grounding strip/busbar side; provided with .16 oz. (5cc) of antioxidant and two each #12-24 x 1/2", M6 x 12mm, #10-32 x 1/2" and M5 x 12mm thread-forming screws.	1

NEW! Enclosure Grounding Kit

- Provides equipotential bonding and protection from static electricity for equipment housed in enclosures
- A discrete grounding point for each piece of equipment within the enclosure allows equipment to be easily added or moved without disturbing other grounding connections
- Anti-rotation design prevents one-hole lugs from loosening
- Grounding washer provides a high performance electrical bond, eliminating the need to manually remove paint
- Built-in ESD port provides a convenient docking station for ESD wrist strap
- Provides proper bonding of *PANZONE*® Active Wall Mount Enclosure PZAEWM3, see page B5.6



Part Number	Part Description	Std. Pkg. Qty.
PZAEGK	One tin-plated copper bracket; 3.92"L x .56"W x .79"H (99.6mm x 14.2mm x 20.1mm); provided with four #12-24 screws, one each #10-32 and #10-24 hex nut, #10 split lock washer, grounding washer and ESD protection sticker.	1

NEW! Mini-TR Grounding Kit

- Bonds sections of the Mini-TR zone box
- Patented hardware incorporates paint piercing serrations to create a bond point between the zone box and lug
- Jumper kit has both ends factory terminated to provide a bolt-on solution
- Engineered to comply with US and International grounding requirements
- Provides proper bonding of *PANZONE*® Wall Mount Cabinets PZC12S, PZC12P, and PZC12W, see page B5.4



Part Number	Part Description	Std. Pkg. Qty.
PZCGK	Grounding and bonding kit; includes all components to properly ground cabinet.	1

Shielded Jack Module Grounding Kit

- Alternate method for grounding modules to another grounding wire in shielded applications



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
CJSGK-XY	Kit used to ground enhanced *GIGA-TX*™ Style Shielded Jack Modules to another ground wire in shielded applications.	10	100

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Electrostatic Discharge (ESD) Port Kits

- Accommodate standard ESD wrist strap 4mm plug
- Can be mounted to front or back of rack or cabinet for convenient access
- Bent 45°, acts as a hook to hold wrist strap
- Two-hole configuration provides anti-rotation and prevents loss of bond
- Barrel permanently marked with the protective earth (ground) symbol
- Engineered to comply with US and International grounding requirements



RGESD2-1



RGESD2B-1



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
ESD Port Kit for #12-24 or M6 Rail Fasteners			
RGESD2-1	Two-hole ESD port with 5/8" hole spacing; provided with an ESD protection sticker, .16 oz. (5cc) of antioxidant and two each #12-24 x 1/2" and M6 x 12mm thread-forming screws.	1	20
ESD Port Kit for #10-32 or M5 Rail Fasteners			
RGESD2A-1	Two-hole ESD port with 5/8" hole spacing; provided with an ESD protection sticker, .16 oz. (5cc) of antioxidant and two each #10-32 x 1/2" and M5 x 12mm thread-forming screws.	1	20
ESD Port Kit for Cage Nut Rail Fasteners			
RGESD2B-1	Two-hole ESD port with 5/8" hole spacing; provided with an ESD protection sticker, .16 oz. (5cc) of antioxidant, two cage nut bonding studs and two #12-24 bonding nuts.	1	20
ESD Port for 1/4" Thru-Hole Rail Fasteners			
RGESD2C-1	Two-hole ESD port with 5/8" hole spacing; provided with an ESD protection sticker, .16 oz. (5cc) of antioxidant, two thru-hole bonding studs and two #12-24 bonding nuts.	1	20

ESD port must be attached to a grounded member.
ESD wrist strap sold separately.

Bonding Screws

- Patent pending screws create an electrical bond between painted patch panels and racks or cabinets
- Serrations on bottom of screw remove paint from patch panel, thus providing metal-to-metal contact
- Available in two color options to meet different application needs
- Thread-forming, provides a bond to the rack or cabinet by removing paint from threaded holes and minimizing metal shavings
- Permanently marked with the protective earth (ground) symbol and *PANDUIT* logo
- Easily installed with Phillips screwdriver



PATENT PENDING

Part Number	Part Description	Std. Pkg. Qty.
RGTBS-C	Black thread-forming bonding screw, #12-24 x 1/2".	100
RGTBSG-C	Green thread-forming bonding screw, #12-24 x 1/2".	100
RGTBSM6-C	Black thread-forming bonding screw, M6 x 15mm.	100
RGTBSM6G-C	Green thread-forming bonding screw, M6 x 15mm.	100
RGTBS1032G-C	Green thread-forming bonding screw, #10-32 x 1/2".	100
RGTBSM5G-C	Green thread-forming bonding screw, M5 x 15mm.	100

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Thread-Forming Screws

- Thread-forming, provide a bond to the rack or cabinet by removing paint from threaded holes and minimizing metal shavings
- Easily installed with 5/16" (8mm) socket head wrench or flat blade screwdriver



Part Number	Part Description	Std. Pkg. Qty.
RGTS-CY	Thread-forming grounding screw, #12-24 x 1/2".	100
RGTSM6-C	Thread-forming grounding screw, M6 x 12mm.	100
RGTS1032-C	Thread-forming grounding screw, #10-32 x 1/2".	100
RGTSM5-C	Thread-forming grounding screw, M5 x 12mm.	100

Paint Piercing Grounding Washer Kit

- Bonds frame members on bolt-together racks
- No paint scraping required
- Green color coding to indicate bonding application
- Engineered to comply with US and International grounding requirements



Part Number	Part Description	Std. Pkg. Qty.
RGW-100-1Y	100 paint piercing bonding washers for 3/8" (M8) stud size; .875" (22.22mm) O.D.; provided with .16 oz. (5cc) of antioxidant.	1

NEW! PATENT PENDING Bonding Hardware Kits

- Patent pending bonding hardware kits incorporate paint piercing serrations to create a bond point between the rack or cabinet and painted patch panels, mounted equipment, servers, busbars and jumpers
- Thread-forming, provide a bond to the rack or cabinet by removing paint from holes and minimizing metal shavings
- Green color coding to indicate bonding application



TRBSK



CGNBSK



THBSK



BGN

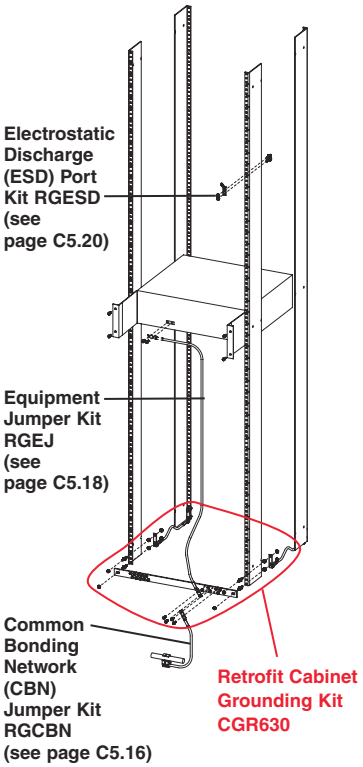
Part Number	Part Description	Std. Pkg. Qty.
Bonding Stud Kits for Threaded Rail Fasteners		
TRBSK	Bonding stud kit for threaded #12-24 rail fasteners; includes 25 bonding studs and 50 bonding nuts.	1
TRBSM6K	Bonding stud kit for threaded M6 rail fasteners; includes 25 bonding studs and 50 bonding nuts.	1
TRBS1032K	Bonding stud kit for threaded #10-32 rail fasteners; includes 25 bonding studs and 50 bonding nuts.	1
TRBSM5K	Bonding stud kit for threaded M5 rail fasteners; includes 25 bonding studs and 50 bonding nuts.	1
Bonding Stud Kit for Cage Nut Rail Fasteners		
CGNBSK	Bonding stud kit for cage nut rail fasteners; includes 25 bonding studs and 50 bonding nuts.	1
Bonding Stud Kit for 1/4" Thru-Hole Rail Fasteners		
THBSK	Bonding stud kit for 1/4" thru-hole rail fasteners; includes 25 bonding studs and 50 bonding nuts.	1
Bonding Nuts		
BGN-C	Bonding nut for threaded #12-24, cage nut, and 1/4" thru-hole rail fasteners.	100
BGNM6-C	Bonding nut for threaded M6 rail fasteners.	100
BGN1032-C	Bonding nut for threaded #10-32 rail fasteners.	100
BGNM5-C	Bonding nut for threaded M5 rail fasteners.	100

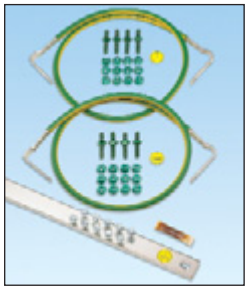
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A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

Retrofit Cabinet Grounding Kits

- Provide a dedicated ground system to maintain system performance and protect network equipment when equipment is already installed
- Patent pending hardware incorporates paint piercing serrations to create a bond point between the cabinet rail, grounding busbar and lug; hardware never needs to be removed for new equipment installations
- Optimized for installation on 19" cabinets that meet EIA-310-D, with functioning equipment, and are deployed in the field
- Provides a complete system of matched components to save cost and labor
- Engineered to comply with US and International grounding requirements



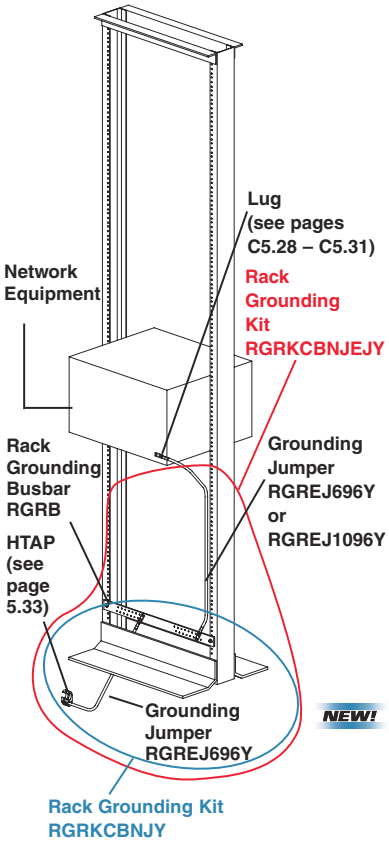


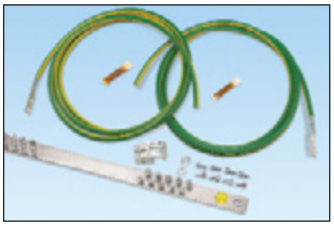
Part Number	Part Description	Std. Pkg. Qty.
CGR630U	Retrofit grounding kit for installation on cabinets with threaded #12-24 or M6 rail fasteners and rail depth up to 30" (.75m); includes one RGRB19U grounding busbar kit and one CGJ630U front to back rail jumper kit.	1
CGR630UA	Retrofit grounding kit for installation on cabinets with threaded #10-32 or M5 rail fasteners and rail depth up to 30" (.75m); includes one RGRB19U grounding busbar kit and one CGJ630UA front to back rail jumper kit.	1
CGR630UB	Retrofit grounding kit for installation on cabinets with cage nut rail fasteners and rail depth up to 30" (.75m); includes one RGRB19U grounding busbar kit and one CGJ630UB front to back rail jumper kit.	1

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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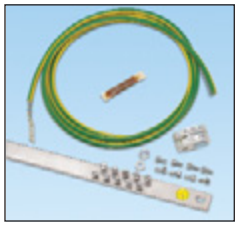
Retrofit Rack Grounding Kits

- Provide a dedicated ground system to maintain system performance and protect network equipment when equipment is already installed
- Optimized for installation on 19" racks that meet EIA-310-D, with functioning equipment, and are deployed in the field
- Provide a complete system of matched components that can be easily selected to save cost and labor
- Thread-forming screws eliminate the need to manually remove paint from the rack
- Engineered to comply with US and International grounding requirements





RGRKCBNJEJY



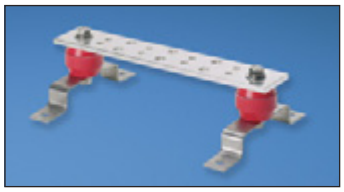
RGRKCBNJY

Part Number	Part Description	Std. Pkg. Qty.
RGRKCBNJEJY	Rack grounding kit to ground the rack and one piece of equipment; includes one RGRB19U busbar, one HTCT250-2-1 HTAP and two RGREJ696Y grounding jumpers.	1
RGRKCBNJY	Rack grounding kit to ground the rack; includes one RGRB19U busbar, one HTCT250-2-1 HTAP and one RGREJ696Y grounding jumper.	1
RGRB19Y	Grounding busbar; 19" (483mm) length; tin plated; fourteen holes arranged for flexibility in mounting; provided with two each #12-24 x 1/2" and M6 x 12mm thread-forming screws.	1
RGRB19U	Grounding busbar; 19" (483mm) length; tin plated; twenty holes arranged for flexibility in mounting with twenty #12-24 x 1/2" hex head screws installed; mounting hole sets have 5/8" (15.9mm) spacing; provided with two each #12-24 x 1/2", M6 x 12mm, #10-32 x 1/2" and M5 x 12mm thread-forming screws and two #12 flat washers for mounting.	1
RGRB19CN	Grounding busbar; 19" (483mm) length; tin plated; twenty holes arranged for flexibility in mounting with twenty #12-24 x 1/2" hex head screws installed; mounting hole sets have 5/8" (15.9mm) spacing; provided with two cage nut bonding studs and four #12-24 bonding nuts.	1
RGREJ696Y	Grounding jumper; #6 AWG (16mm²); 96" (2.44m) length; one end factory terminated to lug; provided with .16 oz. (5cc) of antioxidant and two each #12-24 x 1/2", M6 x 12mm, #10-32 x 1/2" and M5 x 12mm thread-forming screws.	1
RGREJ1096Y	Grounding jumper; #10 AWG (6mm²); 96" (2.44m) length; one end factory terminated to lug; provided with .16 oz. (5cc) of antioxidant and two each #12-24 x 1/2", M6 x 12mm, #10-32 x 1/2" and M5 x 12mm thread-forming screws.	1

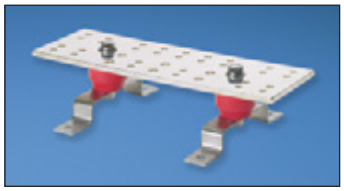
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BICSI/J-STD-607-A Telecommunications Grounding Busbars

- Meet BICSI and J-STD-607-A requirements for network systems grounding applications
- Made of high conductivity copper and tin plated to inhibit corrosion
- Come pre-assembled with brackets and insulators attached for quick installation
- Use *PANDUIT* component labels, sold separately, to identify busbars to meet TIA/EIA-606-A, see chart below



TGB



TMGB

Part Number	Bar Size	No. of Mounting Positions		Std. Pkg. Qty.
		1/4" Stud Hole with 5/8" Hole Spacing	3/8" Stud Hole with 1" Hole Spacing	
Telecommunications Grounding Busbars (TGB)				
GB2B0304TPI-1	1/4" x 2" x 10"	4	3	1
GB2B0306TPI-1	1/4" x 2" x 12"	6	3	1
GB2B0312TPI-1	1/4" x 2" x 20"	12	3	1
Telecommunications Main Grounding Busbars (TMGB)				
GB4B0612TPI-1	1/4" x 4" x 12"	12	6	1
GB4B0624TPI-1	1/4" x 4" x 20"	24	6	1

For additional label sizes, materials and print technologies and to see the complete line of *PANDUIT* identification products, see the Electrical Solutions Catalog SA-ELCB03.

Component Labels for BICSI/J-STD-607-A Telecommunications Grounding Busbars



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Telecommunications Grounding Busbar Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER*™ LS8E Hand-Held Printer Label**	***COUGAR*™ LS9 Hand-Held Printer Label**
All GB2B and GB4B Parts	**C200X100FJJ**	**C200X100YPT**	**C200X100FJC**	**T100X000VPC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Telecommunications Grounding and Bonding Conductor Label Kit

- Meets labeling requirements of J-STD-607-A; each telecommunications grounding and bonding conductor shall be labeled as close as practicable to its point of termination in a readable position
- Can be applied as a wrap-around marker (parallel to cable) or flag marker (45° or 90°) to cable
- Kit includes everything needed to properly label cables; ten flame retardant cable ties and ten rigid plastic yellow tags printed with "IF THIS CONNECTOR OR CABLE IS LOOSE OR MUST BE REMOVED, PLEASE CALL THE BUILDING TELECOMMUNICATIONS MANAGER"



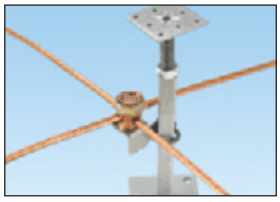
Part Number	Part Description	Std. Pkg. Qty.
LTYK	Label kit includes ten printed tags and ten flame retardant cable ties.	1

Access Floor Grounding Clamp

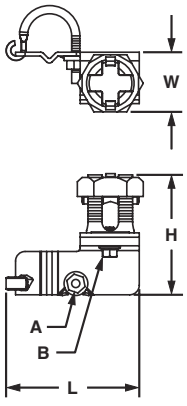
NEW! PATENT PENDING UL LISTED CSA CERTIFIED

- Bonds mesh common bonding network (MCBN) conductors to each other and bonds the access floor pedestals to the conductors
- Made with stainless steel hardware to eliminate zinc whiskers which can dislodge and enter equipment, causing shorts
- Specifically designed to bond perpendicular MCBN conductors per TIA-942
- Bonds to the pedestal with a single bolt to simplify installation
- Accommodates conductors from #6 – 1/0 AWG, minimizes inventory requirements
- Bonds round and square access floor pedestals for greater flexibility





Installed on Pedestal



Part Number	Round Pedestal In. (mm)	Square Pedestal In. (mm)	MCBN Conductor Size Range AWG (mm²)	Figure Dimensions In. (mm)					Tightening Torque In. – Lbs. (Nm)		Std. Pkg. Qty.	Std. Ctn. Qty.
				L	W	H	A	B	Conductor	Clamp		
GPQC1/0	3/4 – 7/8 (19.1 – 22.2)	3/4 – 1 (19.1 – 25.4)	#6 – 1/0 (16 – 50)	3.50 (88.9)	1.75 (44.5)	3.50 (88.9)	7/16 (11.1)	3/8 (9.5)	385 (43.5)	150 (17.0)	1	10

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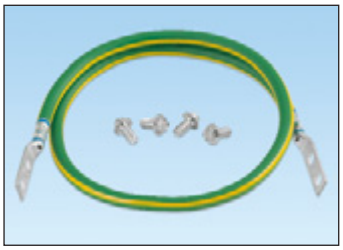
NEW! PATENT PENDING UL LISTED CSA CERTIFIED

Auxiliary Cable Bracket

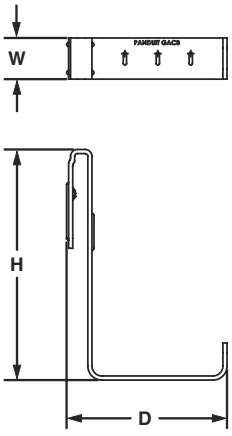
- Bonds ladder rack sections together without drilling holes in the ladder rack
- Supports grounding conductors in the telecommunications room, allows separation of grounding conductors from other cables on the ladder rack
- Holds up to four conductors in sizes up to 750 kcmil
- Bonds all 1 1/2" and 2" ladder rack rails
- Paint piercing teeth provide electrical continuity between ladder rack members while minimizing debris
- Front and back mounting screw options allow easy installation and visual inspection



GACB



GACBJ618U



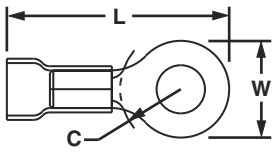
Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
GACB-1	Auxiliary cable bracket; 1.25" (31.8mm) width; 7.00" (177.8mm) height; 4.87" (123.7mm) depth; provided with one mounting screw.	1	10
GACBJ618U	Auxiliary cable bracket jumper for bonding ladder rack sections; #6 AWG (16mm²); 18.0" (.46m) length; factory terminated on both ends with straight, two-hole, long barrel compression lugs; provided with .16 oz. (5cc) of antioxidant and four mounting screws.	1	—

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Ring Terminal, Vinyl Expanded Insulation

- Insulation support helps to prevent wire damage in bending applications
- Brazed seam protects terminal barrel from splitting during the crimp process
- UL flammability UL 94V-0, maximum insulation temperature 221°F (105°C)
- Internal barrel serrations assure good wire contact and maximum tensile strength
- UL and CSA rated up 600 V per UL 486
- Expanded wire entry designed to accommodate wire with a larger insulation thickness





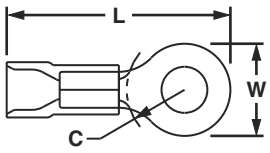
Part Number	Wire Range	Color Code	Stock Thickness	Max. Ins.	Stud Size	Figure Dimensions (In.) L	W	C	PANDUIT Crimping Tool	Std. Pkg. Qty.**	Std. Ctn. Qty.
PV14-6RX-C	16 – 14 AWG	Blue	.03	.200	#6	.96	.31	.25	CT-100‡, CT-600-A‡, CT-1550‡, CT-1551‡	100	500
PV14-8RX-C			.03	.200	#8	.96	.31	.25		100	500
PV14-10RX-C			.03	.200	#10	.96	.31	.25		100	500
PV14-14RX-C			.03	.200	1/4"	1.16	.46	.37		100	500
PV10-6RX-L	12 – 10 AWG	Yellow	.04	.250	#6	1.10	.31	.30	CT-100‡, CT-600-A‡, CT-1550‡, CT-1551‡	50	500
PV10-8RX-L			.04	.250	#8	1.10	.31	.30		50	500
PV10-10RX-L			.04	.250	#10	1.10	.31	.30		50	500
PV10-14RX-L			.04	.250	1/4"	1.29	.52	.39		50	500

‡UL and CSA approved tooling/product combinations. For crimping tool information, see page C5.38.
**To order in bulk, replace -C in the part number with -M for a bulk package of 1000 and replace -L with -D for a bulk package of 500.

Metric Ring Terminal, Vinyl Insulated – Funnel Entry

- Insulation support helps to prevent wire damage in bending applications
- Brazed seam protects terminal barrel from splitting during the crimp process
- UL flammability UL 94V-0, maximum insulation temperature 221°F (105°C)
- Internal barrel serrations assure good wire contact and maximum tensile strength
- Funnel entry for faster insertion and lower installed cost





Part Number	Wire Range	Color Code	Max. Ins.	Stud Size	Figure Dimensions (mm) L	W	C	PANDUIT Crimping Tool	Std. Pkg. Qty.	Std. Ctn. Qty.
PMV1-5RB-CY	.5 – 1.5	Red	4.01	M5	23.1	8.9	7.4	CT-1550	100	500
PMV1-6RB-CY			4.01	M6	28.2	10.9	10.7		100	500
PMV2-5RB-C	1.5 – 2.5	Blue	4.70	M5	23.8	8.9	6.4	CT-1550	100	500
PMV2-6RB-C			4.70	M6	25.7	10.9	9.7		100	500
PMV6-5R-L	2.5 – 6.0	Yellow	6.10	M5	27.1	9.5	7.9	CT-1550	50	250
PMV6-6R-L			6.10	M6	30.3	10.9	9.7		50	250
PMV6-8R-L			6.10	M8	31.4	13.2	9.7		50	250

For crimping tool information, see page C5.38.

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Code Conductor, Two-Hole, Long Barrel with Window Lug

For Use with Stranded Copper Conductors



- Meets J-STD-607-A requirements for network systems grounding applications
- **Tested by Telcordia – meets NEBS Level 3 with AWG conductor**
- Requires crimping tools and dies, see pages C5.38 – C5.41
- UL Listed and CSA Certified with AWG conductor for use up to 35 KV** and temperature rated 90°C when crimped with *PANDUIT* and specified competitor crimping tools and dies
- UL Listed and CSA Certified with AWG conductor for wire range-taking capability when crimped with *PANDUIT*® *UNI-DIE*™ Dieless Crimping Tools
- Color coded barrels marked with *PANDUIT* and specified competitor die index numbers for proper crimp die selection
- Long barrel maximizes number of crimps and provides premium wire pull-out strength and electrical performance
- Inspection window to visually assure full conductor insertion
- Tin plated to inhibit corrosion
- Available with NEMA hole sizes and spacing

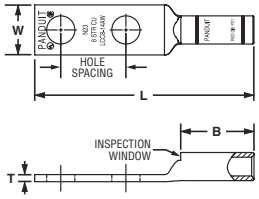


Figure 1: Straight

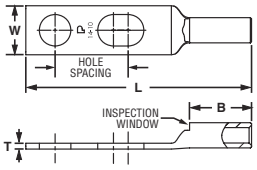


Figure 2: Slotted, Straight

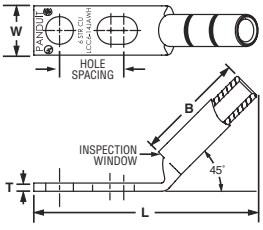


Figure 3: Slotted, 45° Bent

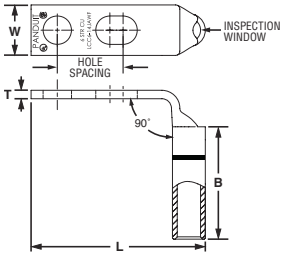


Figure 4: Slotted, 90° Bent

Part Number	Figure No.	Copper Conductor Size	Stud Hole Size In. (mm)	Stud Hole Spacing In. (mm)	Figure Dimensions In. (mm) W	B	T	L	*PANDUIT* Crimping Tool‡	*PANDUIT* Die Color and Die No.‡	Wire Strip Length In. (mm)	Std. Pkg. Qty.
LCC10-14JAW-L*	2	#14 – #10 AWG STR, #12 – #10 AWG SOL (2.5 – 6mm² STR, 4 – 6mm² SOL)	1/4 (M6)	.50 – .63 (12.7 – 16.0)	.42 (10.7)	.53 (13.5)	.05 (1.3)	1.93 (49.0)	CT-100, CT-1570	—	9/16 (14)	50
LCC10-14JAWH-L*	3		1/4 (M6)	.50 – .63 (12.7 – 16.0)	.42 (10.7)	.53 (13.5)	.05 (1.3)	1.78 (45.2)				50
LCC10-14JAWF-L*	4		1/4 (M6)	.50 – .63 (12.7 – 16.0)	.42 (10.7)	.53 (13.5)	.05 (1.3)	1.56 (39.6)				50
LCC10-14BW-L*	1		1/4 (M6)	.75 (19.1)	.42 (10.7)	.53 (13.5)	.05 (1.3)	2.06 (52.3)				50
LCC8-10ABW-L	2	#8 AWG (10mm²)	#10 (M4)	.63 – .75 (16.0 – 19.1)	.41 (10.4)	.70 (17.8)	.08 (2.0)	2.14 (54.4)	CT-1700, CT-930, CT-2931, CT-2931/E	Red P21	3/4 (19)	50
LCC8-14ABW-L	2		1/4 (M6)	.63 – .75 (16.0 – 19.1)	.48 (12.2)	.70 (17.8)	.07 (1.8)	2.23 (56.6)				50
LCC8-14DW-L	1		1/4 (M6)	1.00 (25.4)	.48 (12.2)	.70 (17.8)	.07 (1.8)	2.48 (63.0)				50
LCC8-38DW-L	1		3/8 (M8)	1.00 (25.4)	.60 (15.2)	.70 (17.8)	.05 (1.3)	2.70 (68.6)				50

‡See pages C5.42 and C5.43 for *PANDUIT* and competitor tool and die information.
*Not tested to NEBS Level 3 requirements.
**Consult cable manufacturer for voltage stress relief instructions with applications greater than 2000 V.

Prime items appear in **BOLD**.
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Code Conductor, Two-Hole, Long Barrel with Window Lug (continued)

Part Number	Figure No.	Copper Conductor Size	Stud Hole Size In. (mm)	Stud Hole Spacing In. (mm)	Figure Dimensions In. (mm) W	B	T	L	*PANDUIT* Crimping Tool‡	*PANDUIT* Die Color and Die No.‡	Wire Strip Length In. (mm)	Std. Pkg. Qty.
LCC6-10ABW-L	2	#6 AWG (16mm²)	#10 (M4)	.63 – .75 (16.0 – 19.1)	.46 (11.7)	1.07 (27.2)	.08 (2.0)	2.52 (64.0)	CT-1700, CT-930, CT-2931, CT-2931/E	Blue P24	1 1/8 (29)	50
LCC6-14JAW-L	2		1/4 (M6)	.50 – .63 (12.7 – 16.0)	.48 (12.2)	1.07 (27.2)	.08 (2.0)	2.49 (63.2)				50
LCC6-14JAWH-L	3		1/4 (M6)	.50 – .63 (12.7 – 16.0)	.48 (12.2)	1.07 (27.2)	.08 (2.0)	2.08 (52.8)				50
LCC6-14JAWF-L	4		1/4 (M6)	.50 – .63 (12.7 – 16.0)	.48 (12.2)	1.07 (27.2)	.08 (2.0)	1.66 (42.2)				50
LCC6-14BDW-L	2		1/4 (M6)	.75 – 1.00 (19.1 – 25.4)	.48 (12.2)	1.07 (27.2)	.08 (2.0)	2.86 (72.6)				50
LCC6-14EW-L	1		1/4 (M6)	1.25 (31.8)	.48 (12.2)	1.07 (27.2)	.08 (2.0)	3.11 (79.0)				50
LCC6-56BW-L	1		5/16 (M6)	.75 (19.1)	.56 (14.2)	1.07 (27.2)	.07 (1.8)	2.73 (69.3)				50
LCC6-38BDW-L	2		3/8 (M8)	.75 – 1.00 (19.1 – 25.4)	.62 (15.7)	1.07 (27.2)	.06 (1.5)	3.08 (78.2)				50
LCC4-14ADW-L	2	#4 – #3 AWG STR, #2 AWG SOL (25mm² STR)	1/4 (M6)	.63 – 1.00 (16.0 – 25.4)	.55 (14.0)	1.05 (26.7)	.09 (2.3)	2.87 (72.9)	CT-1700, CT-930, CT-2931, CT-2931/E	Gray P29	1 1/8 (29)	50
LCC4-38DW-L	1		3/8 (M8)	1.00 (25.4)	.62 (15.7)	1.05 (26.7)	.08 (2.0)	3.09 (78.5)				50
LCC2-14AW-Q	1	#2 AWG (35mm²)	1/4 (M6)	.63 (16.0)	.60 (15.2)	1.16 (29.5)	.10 (2.5)	2.67 (67.8)	CT-1700, CT-930, CT-2931, CT-2931/E	Brown P33	1 1/4 (32)	25
LCC2-38DW-Q	1		3/8 (M8)	1.00 (25.4)	.66 (16.8)	1.16 (29.5)	.10 (2.5)	3.24 (82.3)				25
LCC1-14AW-E	1	#1 AWG (35mm²)	1/4 (M6)	.63 (16.0)	.70 (17.8)	1.36 (34.5)	.11 (2.8)	2.89 (73.4)	CT-1700, CT-930, CT-2931, CT-2931/E	Green P37	1 7/16 (37)	20
LCC1-38DW-E	1		3/8 (M8)	1.00 (25.4)	.70 (17.8)	1.36 (34.5)	.11 (2.8)	3.46 (87.9)				20
LCC1/0-14AW-X	1	1/0 AWG (50mm²)	1/4 (M6)	.63 (16.0)	.76 (19.3)	1.44 (36.6)	.12 (3.0)	3.07 (78.0)	CT-930, CT-2931, CT-2931/E	Pink P42	1 1/2 (38)	10
LCC1/0-38DW-X	1		3/8 (M8)	1.00 (25.4)	.76 (19.3)	1.44 (36.6)	.12 (3.0)	3.57 (90.7)				10
LCC2/0-14AW-X	1	2/0 AWG (70mm²)	1/4 (M6)	.63 (16.0)	.85 (21.6)	1.50 (38.1)	.13 (3.3)	3.23 (82.0)	CT-930, CT-2931, CT-2931/E	Black P45	1 9/16 (40)	10
LCC2/0-38DW-X	1		3/8 (M8)	1.00 (25.4)	.85 (21.6)	1.50 (38.1)	.13 (3.3)	3.67 (93.2)				10
LCC3/0-38DW-X	1	3/0 AWG (95mm²)	3/8 (M8)	1.00 (25.4)	.96 (24.4)	1.50 (38.1)	.13 (3.3)	3.70 (94.0)	CT-930, CT-2931, CT-2931/E	Orange P50	1 9/16 (40)	10
LCC3/0-12W-X	1		1/2 (M12)	1.75 (44.5)	.96 (24.4)	1.50 (38.1)	.13 (3.3)	4.87 (123.7)				10
LCC4/0-14AW-X	1	4/0 AWG (95mm²)	1/4 (M6)	.63 (16.0)	1.06 (26.9)	1.56 (39.6)	.14 (3.6)	3.35 (85.1)	CT-930, CT-2931, CT-2931/E	Purple P54	1 5/8 (41)	10
LCC4/0-38DW-X	1		3/8 (M8)	1.00 (25.4)	1.06 (26.9)	1.56 (39.6)	.14 (3.6)	3.81 (96.8)				10
LCC250-38DW-X	1	250 kcmil (120mm²)	3/8 (M8)	1.00 (25.4)	1.17 (29.7)	1.61 (40.9)	.14 (3.6)	3.89 (98.8)	CT-930, CT-2931, CT-2931/E	Yellow P62	1 11/16 (43)	10
LCC250-12DW-X	1		1/2 (M12)	1.00 (25.4)	1.17 (29.7)	1.61 (40.9)	.14 (3.6)	4.12 (104.6)				10

‡See pages C5.42 and C5.43 for *PANDUIT* and competitor tool and die information.
*Not tested to NEBS Level 3 requirements.
**Consult cable manufacturer for voltage stress relief instructions with applications greater than 2000 V.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

Flex Conductor, Two-Hole, Long Barrel with Window Lug

For Use with Flexible, Extra-Flexible, and Code Stranded Copper Conductors



- Meets J-STD-607-A requirements for network systems grounding applications
- Requires crimping tools and dies, see pages C5.38 – C5.41
- UL Listed and CSA Certified with AWG conductor for use up to 35 KV** and temperature rated 90°C when crimped with *PANDUIT* and specified competitor crimping tools and dies
- Color coded barrels marked with *PANDUIT* and specified competitor die index numbers for proper crimp die selection
- Can be used with code conductor and flex conductor class: G, H, I, K, M and Locomotive
- Long barrel maximizes number of crimps and provides premium wire pull-out strength and electrical performance
- Inspection window to visually assure full conductor insertion
- Generously beveled wire entry prevents bent back strands when inserting conductor into barrel
- Tin plated to inhibit corrosion
- Available with NEMA hole sizes and spacing

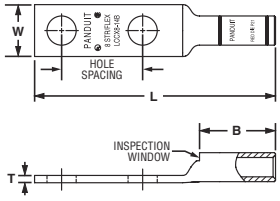


Figure 1: Straight

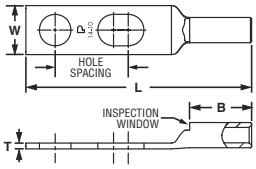


Figure 2: Slotted, Straight

Part Number	Fig. No.	Flex Conductor Size: Class G, H, I, K, M	Flex Conductor Size: Locomotive	Flex Conductor Size: Flex Metric	Code Conductor Size	Stud Hole Size In. (mm)	Stud Hole Spacing In. (mm)	Figure Dimensions In. (mm): W	B	T	L	*PANDUIT* Crimping Tool‡	*PANDUIT* Die Color and Die No.‡	Wire Strip Length In. (mm)	Std. Pkg. Qty.
LCCX8-10AB-L	2	#8 AWG	#8 AWG	10mm²	#8 AWG (10mm²)	#10 (M4)	.63 – .75 (16.0 – 19.1)	.41 (10.4)	.70 (17.8)	.08 (2.0)	2.14 (54.4)	CT-1700, CT-930, CT-2931, CT-2931/E	Red P21	3/4 (19)	50
LCCX8-14AB-L	2					1/4 (M6)	.63 – .75 (16.0 – 19.1)	.48 (12.2)	.70 (17.8)	.07 (1.8)	2.23 (56.6)				50
LCCX8-14D-L	1					1/4 (M6)	1.00 (25.4)	.48 (12.2)	.70 (17.8)	.07 (1.8)	2.48 (63.0)				50
LCCX8-38D-L	1					3/8 (M8)	1.00 (25.4)	.60 (15.2)	.70 (17.8)	.05 (1.3)	2.70 (68.6)				50
LCCX6-10B-L	1	#6 AWG	#6 AWG	16mm²	#6 AWG (16mm²)	#10 (M4)	.75 (19.1)	.46 (11.7)	1.07 (27.2)	.08 (2.0)	2.52 (64.0)	CT-1700, CT-930, CT-2931, CT-2931/E	Blue P24	1 1/8 (29)	50
LCCX6-14AB-L	2					1/4 (M6)	.63 – .75 (16.0 – 19.1)	.48 (12.2)	1.07 (27.2)	.08 (2.0)	2.61 (66.3)				50
LCCX6-14D-L	1					1/4 (M6)	1.00 (25.4)	.48 (12.2)	1.07 (27.2)	.08 (2.0)	2.86 (72.6)				50
LCCX6-38AC-L	2					3/8 (M8)	.63 – .88 (16.0 – 22.4)	.62 (15.7)	1.07 (27.2)	.06 (1.5)	2.96 (75.2)				50
LCCX6-38D-L	1					3/8 (M8)	1.00 (25.4)	.62 (15.7)	1.07 (27.2)	.06 (1.5)	3.08 (78.2)				50

‡See pages C5.44 and C5.45 for *PANDUIT* and competitor tool and die information.
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Prime items appear in **BOLD**.

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Flex Conductor, Two-Hole, Long Barrel with Window Lug (continued)

Part Number	Fig. No.	Flex Conductor Size			Code Conductor Size	Stud Hole Size In. (mm)	Stud Hole Spacing In. (mm)	Figure Dimensions In. (mm)				*PANDUIT* Crimping Tool‡	*PANDUIT* Die Color and Die No.‡	Wire Strip Length In. (mm)	Std. Pkg. Qty.
		Class G, H, I, K, M	Locomotive	Flex Metric				W	B	T	L				
LCCX4-14AB-L	2	#4 AWG	#5, #4, #3 AWG	25mm²	#4 AWG (25mm²)	1/4 (M6)	.63 – .75 (16.0 – 19.1)	.55 (14.0)	1.05 (26.7)	.09 (2.3)	2.63 (66.8)	CT-1700, CT-930, CT-2931, CT-2931/E	Gray P29	1 1/8 (29)	50
LCCX4-38BD-L	2					3/8 (M8)	.75 – 1.00 (19.1 – 25.4)	.62 (15.7)	1.05 (26.7)	.08 (2.0)	3.09 (78.5)				50
LCCX2-38D-E	1	#2 AWG	#2 AWG	35mm²	#2 AWG (35mm²)	3/8 (M8)	1.00 (25.4)	.70 (17.8)	1.36 (34.5)	.11 (2.8)	3.46 (87.9)	CT-1700, CT-930, CT-2931, CT-2931/E	Brown P33	1 7/16 (37)	20
LCCX1-14A-X	1	#1 AWG	#1 AWG	50mm²	#1 AWG (35mm²)	1/4 (M6)	.63 (16.0)	.76 (19.3)	1.44 (36.6)	.12 (3.0)	3.07 (78.0)	CT-930, CT-2931, CT-2931/E	Green P37	1 1/2 (38)	10
LCCX1-38D-X	1					3/8 (M8)	1.00 (25.4)	.76 (19.3)	1.44 (36.6)	.12 (3.0)	3.57 (90.7)				10
LCCX1/0-14A-X	1	1/0 AWG	1/0 AWG	50mm²	1/0 AWG (50mm²)	1/4 (M6)	.63 (16.0)	.85 (21.6)	1.50 (38.1)	.13 (3.3)	3.23 (82.0)	CT-930, CT-2931, CT-2931/E	Pink P42	1 9/16 (40)	10
LCCX1/0-38D-X	1					3/8 (M8)	1.00 (25.4)	.85 (21.6)	1.50 (38.1)	.13 (3.3)	3.67 (93.2)				10
LCCX2/0-14A-X	1	2/0 AWG	2/0 AWG	70mm²	2/0 AWG (70mm²)	1/4 (M6)	.63 (16.0)	.96 (24.4)	1.50 (38.1)	.13 (3.3)	3.27 (83.1)	CT-930, CT-2931, CT-2931/E	Black P45	1 9/16 (40)	10
LCCX2/0-38D-X	1					3/8 (M8)	1.00 (25.4)	.96 (24.4)	1.50 (38.1)	.13 (3.3)	3.70 (94.0)				10
LCCX3/0-38D-X	1	3/0 AWG	3/0 AWG	95mm²	3/0 AWG (95mm²)	3/8 (M8)	1.00 (25.4)	1.06 (26.9)	1.56 (39.6)	.14 (3.6)	3.81 (96.8)	CT-930, CT-2931, CT-2931/E	Orange P50	1 5/8 (41)	10
LCCX4/0-38D-X	1	4/0 AWG	4/0 AWG	120mm²	4/0 AWG (120mm²)	3/8 (M8)	1.00 (25.4)	1.19 (30.2)	2.24 (56.9)	.16 (4.1)	4.55 (115.6)	CT-930, CT-2931, CT-2931/E	Purple P54	2 5/16 (59)	10
LCCX250-38D-X	1	250 kcmil	262.6 kcmil	—	—	3/8 (M8)	1.00 (25.4)	1.28 (32.5)	2.24 (56.9)	.17 (4.3)	4.59 (116.6)	CT-930, CT-2931, CT-2931/E	Yellow P62	2 5/16 (59)	10

‡See pages C5.44 and C5.45 for *PANDUIT* and competitor tool and die information.
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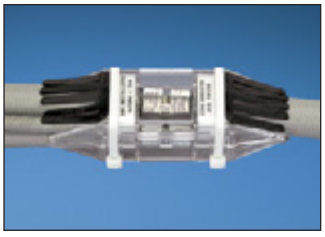
Code/Flex Conductor HTAP Kit

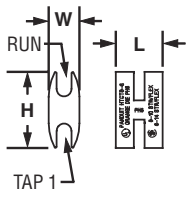
- Includes all components to make a complete HTAP and cover installation: HTCT HTAP, matching CLRCVR clear cover, and cable ties
- Each HTCT HTAP designed to terminate a wide range of copper code and flex conductor combinations to accommodate a variety of applications
- HTAPs incorporate a unique slotted design that allows for quick and easy installation using supplied *PANDUIT* cable ties; saves time and cost
- Matching clear covers are made from high impact plastic and provide high impact strength and 360° viewing of installed HTAP
- Clear covers have a UL 94V-0 flame rating and an oxygen index of 28 providing self-extinguishing, flame retardant properties
- Requires crimping tools and dies, see pages C5.39 – C5.41
- UL Listed and CSA Certified with AWG conductor for applications up to 600 V when crimped with *PANDUIT* and specified competitor crimping tools and *PANDUIT* crimping dies



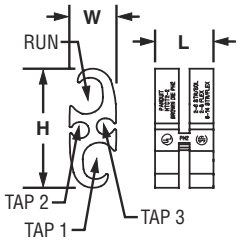




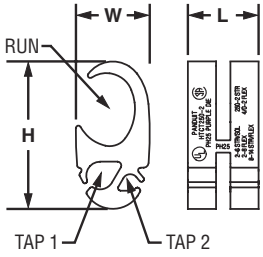




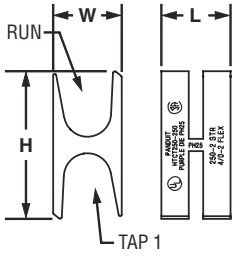
HTCT6-6



HTCT2-2



HTCT250-2



HTCT250-250

Part Number	Components		Copper Conductor Size Range					Std. Pkg. Qty.
	HTAP Part No.	Clear Cover Part No.	Wire Strand Type	Run	Tap 1	Tap 2	Tap 3	
HTWC6-6-1	HTCT6-6-1	CLRCVR1-1	Code	#6 – #10 AWG (10 – 6mm²)	#6 – #14 AWG (10 – 2.5mm²)	— —	— —	1
			Flex	#6 – #10 AWG (10 – 6mm²)	#6 – #14 AWG (10 – 2.5mm²)	— —	— —	
HTWC2-2-1	HTCT2-2-1	CLRCVR2-1	Code	#2 – #6 AWG STR/SOL (25 – 16mm²)	#2 – #6 AWG STR/SOL (25 – 16mm²)	#8 – #14 AWG (6 – 2.5mm²)	#8 – #14 AWG (6 – 2.5mm²)	1
			Flex	#2 – #8 AWG (25 – 10mm²)	#2 – #8 AWG (25 – 10mm²)	#8 – #14 AWG (6 – 2.5mm²)	#8 – #14 AWG (6 – 2.5mm²)	
HTWC250-2-1	HTCT250-2-1	CLRCVR3-1	Code	250 kcmil – #2 AWG (120 – 35mm²)	#2 – #6 AWG STR/SOL (25 – 16mm²)	#8 – #14 AWG (6 – 2.5mm²)	— —	1
			Flex	4/0 – #2 AWG (95 – 35mm²)	#2 – #8 AWG (25 – 10mm²)	#8 – #14 AWG (6 – 2.5mm²)	— —	
HTWC250-250-1	HTCT250-250-1	CLRCVR3-1	Code	250 kcmil – #2 AWG (120 – 35mm²)	250 kcmil – #2 AWG (120 – 35mm²)	— —	— —	1
			Flex	4/0 – #2 AWG (95 – 35mm²)	4/0 – #2 AWG (95 – 35mm²)	— —	— —	

*See pages C5.33 and C5.34 for more information on HTAPs and clear covers, including crimping tools.
Labels for clear covers are sold separately and are printed with the *PANDUIT* LS8E Printer, see pages F1.3 – F1.4.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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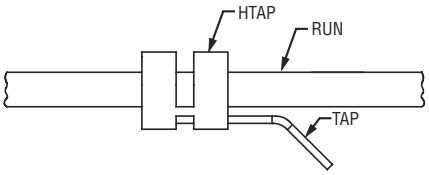
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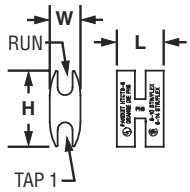
Code/Flex Conductor HTAP

For Making Parallel and Multiple Tap Connections on Code and Flex Conductors

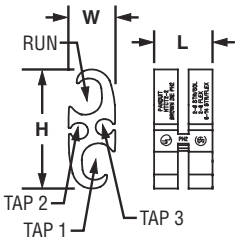


- Used to tap into continuous conductors as a splice or pigtailing
- Each HTAP terminates a wide range of conductor sizes and combinations of code and flex conductors Class G, H, I and Locomotive to suit a variety of applications
- Slotted design allows quick and easy assembly of conductor to HTAP using three *PANDUIT* 94V-0 cable ties included
- Tap grooves are separated from one another allowing them to function independently so HTAP can be used with a single or multiple taps providing maximum design and installation flexibility
- Color coded and marked with *PANDUIT* die index numbers for proper crimp die selection
- Requires crimping tools and dies, see pages C5.39 – C5.41
- UL Listed and CSA Certified with AWG conductor for applications up to 600 V when crimped with *PANDUIT* and specified competitor crimping tools and *PANDUIT* crimping dies
- Tin plated to inhibit corrosion

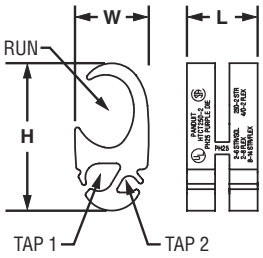




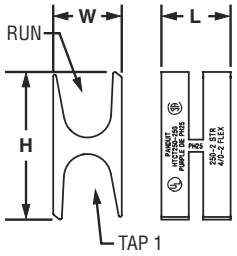
HTCT6-6



HTCT2-2



HTCT250-2



HTCT250-250

Part Number	Copper Conductor Size Range					Figure Dimensions In. (mm)			*PANDUIT* Crimping Tool‡	*PANDUIT* Die Color and Die No.‡	Wire Strip Length In. (mm)	Std. Pkg. Qty.
	Wire Strand Type	Run	Tap 1	Tap 2	Tap 3	L	W	H				
HTCT6-6-1	Code	#6 – #10 AWG (10 – 6mm²)	#6 – #14 AWG (10 – 2.5mm²)	— —	— —	.61 (15.5)	.40 (10.2)	.99 (25.1)	CT-930, CT-2931, CT-2931/E	Orange PH6	11/16 (18)	1
	Flex	#6 – #10 AWG (10 – 6mm²)	#6 – #14 AWG (10 – 2.5mm²)	— —	— —							
HTCT2-2-1	Code	#2 – #6 AWG STR/SOL (25 – 16mm²)	#2 – #6 AWG STR/SOL (25 – 16mm²)	#8 – #14 AWG (6 – 2.5mm²)	#8 – #14 AWG (6 – 2.5mm²)	.76 (19.3)	.61 (15.5)	1.55 (39.4)	CT-930, CT-2931, CT-2931/E	Brown PH2	13/16 (21)	1
	Flex	#2 – #8 AWG (25 – 10mm²)	#2 – #8 AWG (25 – 10mm²)	#8 – #14 AWG (6 – 2.5mm²)	#8 – #14 AWG (6 – 2.5mm²)							
HTCT250-2-1	Code	250 kcmil – #2 AWG (120 – 35mm²)	#2 – #6 AWG STR/SOL (25 – 16mm²)	#8 – #14 AWG (6 – 2.5mm²)	— —	.92 (23.4)	.96 (24.4)	1.92 (48.8)	CT-930, CT-2931, CT-2931/E	Purple PH25	1 (25)	1
	Flex	4/0 – #2 AWG (95 – 35mm²)	#2 – #8 AWG (25 – 10mm²)	#8 – #14 AWG (6 – 2.5mm²)	— —							
HTCT250-250-1	Code	250 kcmil – #2 AWG (120 – 35mm²)	250 kcmil – #2 AWG (120 – 35mm²)	— —	— —	.90 (22.9)	.89 (22.6)	1.92 (48.8)	CT-930, CT-2931, CT-2931/E	Purple PH25	1 (25)	1
	Flex	4/0 – #2 AWG (95 – 35mm²)	4/0 – #2 AWG (95 – 35mm²)	— —	— —							

‡See page C5.48 for *PANDUIT* and competitor tool and die information.

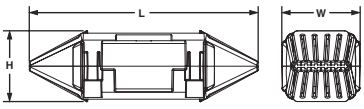
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Clear Covers for HTCT HTAPs

For Use with PANDUIT HTCT HTAPs

- Made of high impact plastic to provide high impact strength and 360° inspections of crimped connection to assure the crimp is complete and the correct die was used
- Incorporate dual self-latching spring loaded latches and supplied with two *PANDUIT* UL 94V-0 cable ties to allow for easy snap-on assembly and ensure covers are secured
- Low profile design minimizes space requirements
- Each cover half supports installation information labels inside plastic retainer strips to allow labels to be viewed on either side of cover and to protect labels from being removed
- Incorporate molded in flash barriers which encompass the HTAP installation providing protection against electrical flash over
- UL 94V-0 flame rating and oxygen index of 28 providing self-extinguishing, flame retardant properties
- Part number, voltage rating, temperature rating and HTCT part number molded into cover for easy identification
- Flexible fingers located at each end of cover prevent foreign objects from entering cover and are made from ductile plastic material that allows easy installation and will not damage conductor insulation





Shown Assembled

Part Number	Use with HTAP Part Number	Figure Dimensions In. (mm)			Std. Pkg. Qty.
		L	W	H	
CLRCVR1-1	HTCT6-6	4.48 (113.8)	1.41 (35.8)	1.20 (30.5)	1
CLRCVR2-1	HTCT2-2	5.10 (129.5)	1.66 (42.2)	1.40 (35.6)	1
CLRCVR3-1	HTCT250-2, HTCT250-250	5.35 (135.9)	2.16 (54.9)	1.40 (35.6)	1

Labels for clear covers are sold separately and are printed with the *PANDUIT* LS8E Printer, see page F1.2.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

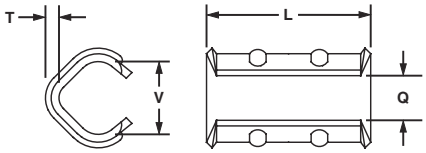
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Code Conductor, Thin Wall, CTAP

For Copper Code Stranded Connections



- For copper-to-copper tapping splicing or pigtailing
- Wire range-taking capability minimizes inventory requirements
- Color coded for proper crimp die selection
- Ribbed design provides high strength
- Made from high conductivity wrought copper
- UL Listed and CSA Certified with AWG conductor to 600 V and temperature rated to 90°C when crimped with *PANDUIT* and specified competitor crimping tools and dies



Part Number	Copper Conductor Size		Number of Ribs	Figure Dimensions In. (mm)				*PANDUIT* Crimping Tool‡	*PANDUIT* Color Code	Wire Strip Length In. (mm)	Std. Pkg. Qty.
	Run	Tap		L	T	V	Q				
CTAPF4-12-C	#6 AWG (16mm²)	#8 – #6 AWG (10 – 16mm²)	1	1.25 (31.8)	.07 (1.8)	.40 (10.21)	.28 (7.1)	CT-1700, CT-930, CT-2931	Brown	1 5/16 (33.3)	100
	#5, #4 AWG (16, 25mm²)	#12 – #8 AWG (4 – 10mm²)									
CTAPF3-12-C	#5, #4 AWG (16, 25mm²)	#6 – #5 AWG (16mm²)	1	1.25 (31.8)	.08 (2.0)	.46 (11.7)	.31 (7.9)	CT-1700, CT-930, CT-2931	Green	1 5/16 (33.3)	100
	#3 AWG (25mm²)	#12 – #6 AWG (4 – 16mm²)									
CTAPF2-12-C	#4 AWG (25mm²)	#4 AWG (25mm²)	1	1.25 (31.8)	.08 (2.0)	.51 (13.0)	.33 (8.4)	CT-930, CT-2931	Pink	1 5/16 (33.3)	100
	#3 AWG (25mm²)	#5 AWG (16mm²)									
	#2 AWG (35mm²)	#12 – #6 AWG (4 – 16mm²)									
CTAPF1-12-C	#3 AWG (25mm²)	#4 – #3 AWG (25mm²)	2	1.82 (46.2)	.08 (2.0)	.57 (14.5)	.40 (10.2)	CT-930, CT-2931	Black	1 7/8 (47.6)	100
	#2 AWG (35mm²)	#5 – #4 AWG (16 – 25mm²)									
	#1 AWG (35mm²)	#12 – #5 AWG (4 – 16mm²)									
CTAPF1/0-12-L	#2 AWG (35mm²)	#4 – #2 AWG (25 – 35mm²)	2	1.82 (46.2)	.09 (2.3)	.63 (16.0)	.42 (10.7)	CT-930, CT-2931	Orange	1 7/8 (47.6)	50
	#1 AWG (35mm²)	#4 – #3 AWG (25mm²)									
	1/0 AWG (50mm²)	#12 – #4 AWG (4 – 25mm²)									
CTAPF2/0-12-Q	#1 AWG (35mm²)	#2 – #1 AWG (35mm²)	2	1.82 (46.2)	.09 (2.3)	.71 (18.0)	.48 (12.2)	CT-930, CT-2931	Purple	1 7/8 (47.6)	25
	1/0 AWG (50mm²)	#3 – #2 AWG (25 – 35mm²)									
	2/0 AWG (70mm²)	#12 – #3 AWG (4 – 35mm²)									
CTAPF3/0-12-Q	1/0 AWG (50mm²)	#1 – 1/0 AWG (50mm²)	2	1.82 (46.2)	.09 (2.3)	.81 (20.6)	.55 (14.0)	CT-930, CT-2931	Yellow	1 7/8 (47.6)	25
	2/0 AWG (70mm²)	#2 – #1 AWG (35mm²)									
	3/0 AWG (95mm²)	#12 – #2 AWG (4 – 35mm²)									

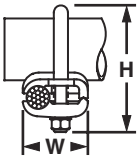
‡See pages C5.46 and C5.47 for *PANDUIT* and competitor tool and die information.

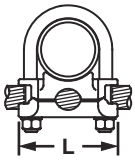
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Grounding Clamp, U-Bolt, Bronze

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





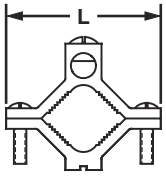


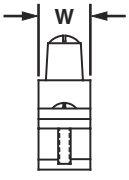
Part Number	Ground Rod Size In. (mm)	Iron Pipe Size In. (mm)	Conductor Size Range AWG (mm²)	Figure Dimensions In. (mm)			Bolt Dia. In. (mm)	Hex Size In. (mm)	Tightening Torque In.-Lbs. (Nm)	Std. Pkg. Qty.
				L	W	H				
GPL-8-Q	7/8 or 1 (23)	1/2 or 3/4 (20 or 25)	#8 SOL – #4 STR (10 SOL – 16 STR)	2.38 (60.5)	1.38 (35.1)	2.63 (66.8)	3/8 (9.5)	9/16 (14)	110 (12.5)	25
GPL-14-X	—	1 (32)	#8 SOL – #4 STR (10 SOL – 16 STR)	2.63 (66.8)	1.38 (35.1)	2.75 (69.9)	3/8 (9.5)	9/16 (14)	110 (12.5)	10
GPL-15-X	—	1 (32)	#4 SOL – 2/0 STR (16 STR – 70 STR)	2.63 (66.8)	1.63 (41.4)	2.75 (69.9)	3/8 (9.5)	9/16 (14)	180 (20.5)	10

Grounding Clamp for Water Pipes, Bronze



- Used to ground copper code conductor to water pipe or copper tube
- Cast from high strength, electrolytic bronze to provide reliable grounding connections
- Plated steel screws provide high strength and inhibit corrosion
- Accommodates a wide range of pipe, tube, rod and conductor sizes – minimizes inventory
- UL Listed for grounding and bonding with AWG conductor and suitable for direct burial in earth or concrete





Part Number	Water Pipe Range In. (mm)	Conductor Size Range AWG (mm²)	Figure Dimensions In. (mm)		Tightening Torque In.-Lbs. (Nm)		Std. Pkg. Qty.
			L	W	Conductor	Clamp	
KP1-C	1/2 – 1 (20 – 32)	#10 SOL – #2 STR (6 SOL – 35 STR)	2.28 (57.9)	.66 (16.8)	50 (5.5)	50 (5.5)	100
KP2-L	1 1/4 – 2 (40 – 63)	#10 SOL – #2 STR (6 SOL – 35 STR)	3.58 (90.9)	.73 (18.5)	50 (5.5)	50 (5.5)	50

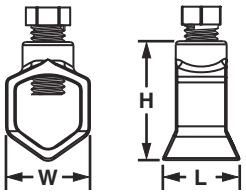
Prime items appear in **BOLD**.

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Grounding Rod Clamp, Bronze



- Used for grounding copper conductor parallel to ground rods
- Made from high strength, seamless electrolytic bronze to provide long term durability
- High strength silicon bronze hardware provides long term reliable assembly
- Accommodates a wide range of rod and conductor sizes – minimizes inventory
- UL Listed and CSA Certified for grounding and bonding with AWG conductor and suitable for direct burial in earth and concrete

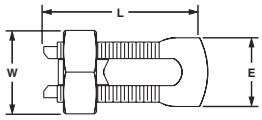


Part Number	Ground Rod Size In. (mm)	Conductor Size Range AWG (mm²)	Figure Dimensions In. (mm) L	W	H	Hex Size In. (mm)	Tightening Torque In.-Lbs. (Nm)	Std. Pkg. Qty.
WB12-L	1/2 (12.7)	#2 – #10 STR, #10 SOL (35 – 6 STR, 6 SOL)	.88 (22.4)	.84 (21.3)	1.28 (32.5)	1/2 (13)	180 (20.5)	50
WB34-X	5/8 (14.2) 3/4 (17.2)	1/0 – #8 STR (50 – 10 STR) #2 – #8 STR (35 – 10 STR)	1.03 (26.2)	1.06 (26.9)	1.54 (39.1)	1/2 (13)	180 (20.5)	10
WB58-Q	5/8 (14.2)	1/0 – #8 STR (50 – 10 STR)	1.04 (26.4)	.92 (23.4)	1.40 (35.6)	1/2 (13)	180 (20.5)	25

Split Bolt, Copper

- Made from high strength copper alloy to resist corrosion and provide premium electrical and mechanical performance
- Wire range-taking capability minimizes inventory requirements
- Nut hex provides correct fit with socket, box, or open end wrenches resulting in proper torquing of electrical connection
- Pressure bar provides secure connection on a full range of conductor combinations used with each connector assuring premium wire pull-out strength
- UL Listed and CSA Certified with AWG conductor for use up to 600 V and temperature rated 90°C





Part Number	Copper Conductor Range of Equal Run and Tap AWG (mm²) Min.	Max.	Min. Tap with One Max. Run AWG (mm²)	Max. Conductor Copperweld STR	TYPE A	Figure Dimensions In. (mm) E	W	L	Tightening Torque In.-Lbs. (Nm)	Std. Pkg. Qty.
SBC3-C	#6 SOL (16 SOL)	#3 SOL (25 SOL)	#12 SOL (4 SOL)	3 No. 9	5A	.58 (14.7)	.81 (20.6)	1.16 (29.5)	165 (18.6)	100

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Crimping Tools

Hand Operated Plier Type Tool

- Plier type
- Installer controlled crimp



Part Number	Part Description	Std. Pkg. Qty.
CT-100	Crimps most *PANDUIT* #22 – #10 AWG insulated and non-insulated terminals, disconnects, and splices. Cuts #4, #6, #8 and #10 screw sizes. Cuts and strips wire. Excellent all-around application tool of heat treated finished steel with comfortable cushioned plastic grip handles.	1

CONTOUR CRIMP™ Controlled Cycle Tools

- Specifically designed for the installation of *PAN-TERM*® Terminals, Disconnects, and Splices
- Controlled cycle mechanism assures high quality, consistent terminations
- Ergonomic tool design assures operator comfort, safety, and performance
- Multi-position locator facilitates a high quality repeatable crimp



CT-1550



CT-1570



CT- 1700

Part Number	Part Description	Std. Pkg. Qty.
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.	1
CT-1570	Crimps most *PAN-TERM*® #22 – #10 AWG and .5 – 6.0mm² Non-Insulated Terminals and Disconnects. Crimps *PANDUIT* #22 – #10 AWG and .5 – 6.0mm² non-insulated splices and #10 AWG compression lugs.	1
CT-1700	Crimps *PANDUIT* #8 – #2 AWG non-insulated tubular terminals (S series), #8 – #1 AWG copper code conductor lugs and splices, #6 – #4 AWG dual rated aluminum lugs and splices and CTAPF10-16 to CTAPF3-12 copper taps. Includes 5-position, color coded rotating die.	1

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Die Type, Manual Hydraulic, 14 Ton, Crimping Tool

- Two-stage rapid advance hydraulic system minimizes number of pumps required to complete a crimp – saves time
- Cushioned grip prevents hands from slipping on tool – reduces fatigue
- Provides UL Listed and CSA Certified connections on *PANDUIT® PAN-LUG™* Copper and Aluminum Lugs and Splices and Copper Taps
- Open "C-Head" design allows easy loading of crimping dies and connectors, saves time
- Requires crimping dies, see page C5.41
- Dies installed using spring loaded die retention pins, no need for tools
- Rubber boot on crimp head provides abrasion protection
- Audible "pop-off" valve indicates crimp completion
- Crimp head rotates 180°, provides versatility for use in restricted spaces



Part Number	Part Description	Std. Pkg. Qty.
CT-930	Terminates *PANDUIT® PAN-LUG™* Compression Connectors: • Copper compression lugs and splices for #8 AWG – 750 kcmil (10 – 300mm²) code conductor • Copper compression lugs and splices for #8 AWG – 600 kcmil (10 – 300mm²) flex conductor • Copper compression CTAPF taps for #10 – 3/0 AWG (6 – 70mm²) code conductor • Copper compression CTAP taps for #8 – 4/0 AWG (10 – 95mm²) code conductor • Copper compression HTCT taps for #14 AWG – 250 kcmil (2.5 – 125mm²) code conductor, #14 – 4/0 AWG (2.5 – 120mm²) flex conductor • Aluminum compression lugs and splices for #6 AWG – 600 kcmil (16 – 300mm²) code conductor • Aluminum compression HTAPs for #14 AWG – 500 kcmil (2.5 – 240mm²) code conductor • *PANDUIT® PAN-TERM®* Tubular Terminals for #8 AWG – 250 kcmil (10 – 120mm²) code conductor Warranty: 5 years CT-930 includes: • Tool • Plastic tool case with die storage	1

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Die Type, Battery Powered Hydraulic, 12 Ton (107 kN), Crimping Tool

- Two-stage rapid advance hydraulic system minimizes cycle time
- Provides UL Listed and CSA Certified connections on *PANDUIT® PAN-LUG™* Copper and Aluminum Lugs and Splices and Copper Taps
- Open "C-Head" design allows easy loading of crimping dies and connectors, saves time
- Rubber boot on crimp head provides abrasion protection
- Ram automatically retracts when crimp cycle is complete
- Tool provided with two, high capacity 12 VDC rechargeable nickel-metal hydride batteries – provides for continuous operation and eliminates "memory" build-up, one hour charge time
- Eight second crimp cycle time provides quick terminations, saves time
- Uses industry standard MAKITA* batteries and charger – industry proven reliability easy to obtain from local retail sources
- Requires crimping dies, see page C5.41
- Dies installed using spring loaded die retention pins – no need for tools
- Crimp head rotates 360° – provides versatility for use in restricted spaces

*MAKITA is a registered trademark of Makita Corporation.

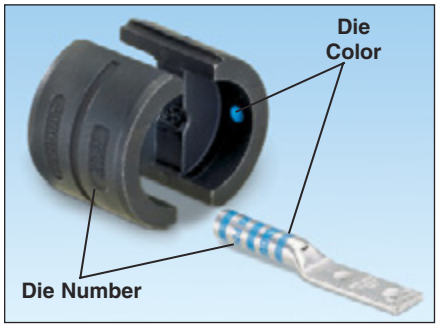


Part Number	Part Description	Std. Pkg. Qty.
CT-2931	Terminates *PANDUIT® PAN-LUG™* Compression Connectors: • Copper compression lugs and splices for #8 AWG – 750 kcmil (10 – 300mm²) code conductor • Copper compression lugs and splices for #8 AWG – 600 kcmil (10 – 300mm²) flex conductor • Copper compression CTAPF taps for #10 – 3/0 AWG (6 – 70mm²) code conductor • Copper compression CTAP taps for #8 – 4/0 AWG (10 – 95mm²) code conductor • Copper compression HTCT taps for #14 AWG – 250 kcmil (2.5 – 125mm²) code conductor, #14 – 4/0 AWG (2.5 – 120mm²) flex conductor • Aluminum compression lugs and splices for #6 AWG – 600 kcmil (16 – 300mm²) code conductor • Aluminum compression HTAPs for #14 AWG – 500 kcmil (2.5 – 240mm²) code conductor • *PANDUIT® PAN-TERM®* Tubular Terminals for #8 AWG – 250 kcmil (10 – 120mm²) code conductor Warranty: 3 years CT-2931 includes: • Tool • Two 12 VDC, rechargeable NiMH batteries • One battery charger, 115 VAC • Steel tool case with storage for batteries, charger and crimping dies	1
CE **CT-2931/E**	Tool is CE approved. Terminates *PANDUIT® PAN-LUG™* Compression Connectors: • Copper compression lugs and splices for #8 AWG – 750 kcmil (10 – 300mm²) code conductor • Copper compression lugs and splices for #8 AWG – 600 kcmil (10 – 300mm²) flex conductor • Copper compression CTAPF taps for #10 – 3/0 AWG (6 – 70mm²) code conductor • Copper compression CTAP taps for #8 – 4/0 AWG (10 – 95mm²) code conductor • Copper compression HTCT taps for #14 AWG – 250 kcmil (2.5 – 125mm²) code conductor, #14 – 4/0 AWG (2.5 – 120mm²) flex conductor • Aluminum compression lugs and splices for #6 AWG – 600 kcmil (16 – 300mm²) code conductor • Aluminum compression HTAPs for #14 AWG – 500 kcmil (2.5 – 240mm²) code conductor • *PANDUIT® PAN-TERM®* Tubular Terminals for #8 AWG – 250 kcmil (10 – 120mm²) code conductor Warranty: 3 years CT-2931/E includes: • Tool • Two 12 VDC, rechargeable NiMH batteries • One battery charger, 230 VAC • Steel tool case with storage for batteries, charger and crimping dies	1

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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CD-920 Crimping Dies

- Crimping dies and connectors are color coded for easy matching
- Emboss die index number on connector barrels for post crimp inspection
- Part number permanently marked on crimping die for easy identification
- Provide circumferential crimp results in terminations with premium electrical and mechanical performance
- Used in *PANDUIT* crimping tools; see the CT-930 crimping tool on page C5.39 and the CT-2931 and CT-2931/E crimping tools on page C5.40





CD-920

Part Number	Used to Install *PANDUIT* Compression Lug and Splice Sizes Copper Code Conductor Size and Die Color and Die No.	Std. Pkg. Qty.
CD-920-8	#8 AWG (10mm²), Red P21	1
CD-920-6	#6 AWG (16mm²), Blue P24	1
CD-920-4	#4 AWG (25mm²), Gray P29	1
CD-920-2	#2 AWG (35mm²), Brown P33	1
CD-920-1	#1 AWG (35mm²), Green P37	1
CD-920-1/0	1/0 AWG (50mm²), Pink P42	1
CD-920-2/0	2/0 AWG (70mm²), Black P45	1
CD-920-3/0	3/0 AWG (95mm²), Orange P50	1
CD-920-4/0	4/0 AWG (95mm²), Purple P54	1
CD-920-250	250 kcmil (120mm²), Yellow P62	1

Part Number	Used to Install *PANDUIT* HTAP Part Numbers Copper HTAP and Die Color and Die No.	Std. Pkg. Qty.
CD-920H-6	HTCT6-6-1, Orange PH6	1
CD-920H-2	HTCT2-2-1, Brown PH2	1
CD-930H-250	HTCT250-2-1, HTCT250-250-1, Purple PH25	1

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For use with Copper Conductors

Installation Tooling and Die Selections for Type LCC-W

			PANDUIT							Thomas & Betts			
PANDUIT Part Number	Std. Wire Size	Wire Strip Length (In.)	CT-1570	CT-1701①	CT-1700①	CT-720	CT-920, CT-920CH, CT-930, CT-930CH, CT-2920, CT-2930, CT-2931, CT-2931/E, CT-930LPCH⑤, CT-940CH③, CT-2940③	*UNI-DIE*™ CT-980, CT-980CH, CT-2950④, CT-2980, CT-2981, CT-980LPCH⑤ Extended Wire Range⑧	CT-2001, CT-2002	TBM20S, TBM25S	TBM5	TBM8	TBM12, 13642M
			Die Part Number/Color Code and Die Index Number/(Number of Crimps)										
LCC10-W	#14 – #10 AWG STR, #12 – #10 AWG SOL	9/16	12-10 (2)	P10 (2)	—	—	—	—	—	—	—	—	—
LCC8-W	#8 AWG	3/4	—	—	Red P21 (3)	CD-720-1 Red P21 (2)	CD-920-8 Red P21 (1)	—	CD-2001-8 Red P21 (2)	Red 21 (3)	Red 21 (1)	Red 21 (1)	Red 21 (1)
LCC6-W	#6 AWG	1 1/8	—	—	Blue P24 (3)	CD-720-1 Blue P24 (2)	CD-920-6 Blue P24 (1)	—	CD-2001-6 Blue P24 (2)	Blue 24 (3)	Blue 24 (1)	Blue 24 (1)	Blue 24 (1)
LCC4-W	#4 – #3 AWG STR, #2 AWG SOL	1 1/8	—	—	Gray P29 (3)	CD-720-1 Gray P29 (2)	CD-920-4 Gray P29 (1)	#4 – #2 AWG #2 AWG SOL Only (1)	CD-2001-4 Gray P29 (2)	Gray 29 (3)	Gray 29 (1)	Gray 29 (1)	Gray 29 (1)
LCC2-W	#2 AWG	1 1/4	—	—	Brown P33 (3)	CD-720-1 Brown P33 (2)	CD-920-2 Brown P33 (1)	#6 – #2 AWG (1)	CD-2001-2 Brown P33 (2)	Brown 33 (3)	Brown 33 (1)	Brown 33 (1)	Brown 33 (1)
LCC1-W	#1 AWG	1 7/16	—	—	Green P37 (4)	CD-720-2 Green P37 (2)	CD-920-1 Green P37 (1)	#6 – #1 AWG (1)	CD-2001-1 Green P37 (2)	—	Green 37 (1)	Green 37 (1)	Green 37 (1)
LCC1/0-W	1/0 AWG	1 1/2	—	—	—	CD-720-2 Pink P42 (2)	CD-920-1/0 Pink P42 (2)	#6 – 1/0 AWG (2)	CD-2001-1/0 Pink P42 (2)	—	Pink 42 (2)	Pink 42 (2)	Pink 42 (2)
LCC2/0-W	2/0 AWG	1 9/16	—	—	—	CD-720-2 Black P45 (3)	CD-920-2/0 Black P45 (3)	#4 – 2/0 AWG (2)	CD-2001-2/0 Black P45 (3)	—	Black 45 (3)	Black 45 (3)	Black 45 (2)
LCC3/0-W	3/0 AWG	1 9/16	—	—	—	CD-720-2 Orange P50 (3)	CD-920-3/0 Orange P50 (3)	#2 – 3/0 AWG (2)	CD-2001-3/0 Orange P50 (3)	—	Orange 50 (3)	Orange 50 (3)	Orange 50 (2)
LCC4/0-W	4/0 AWG	1 5/8	—	—	—	CD-720-3 Purple P54 (3)	CD-920-4/0 Purple P54 (3)	#1 – 4/0 AWG (2)	CD-2001-4/0 Purple P54 (3)	—	Purple 54 (3)	Purple 54 (3)	Purple 54 (2)
LCC250-W	250 kcmil	1 11/16	—	—	—	CD-720-3 Yellow P62 (4)	CD-920-250 Yellow P62 (3)	1/0 AWG – 250 kcmil (3)	CD-2001-250 Yellow P62 (3)	—	Yellow 62 (4)	Yellow 62 (4)	Yellow 62 (2)

①The CT-1700 and CT-1701 crimp die pockets are integrated into the tool frame.
②Half width dies.
③CD-920 dies can be used with CT-940CH and CT-2940 tools with CD-940-DA adapter.
④Maximum size: 500 kcmil lugs.
⑤Maximum size: 250 kcmil lugs.
⑥Requires U die adapter.
⑦Minimum size: #4 AWG lugs.
⑧Extended wire range when crimped with these *PANDUIT*® *UNI-DIE*™ Dieless Crimping Tools.

Prime items appear in **BOLD**.

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Installation Tooling and Die Selections for Type LCC-W (continued)

Thomas & Betts			Burndy					Anderson	Penn-Union	Greenlee
TBM15, TBM15I, TBM15BSCR	TBM8-750M-1, TBM8-750, TBM750BSCR⑦, TBM8-750BSCR	TBM14M, TBM14BSCR, BPLT14BSCR, 13100A	Y2MR, Y1MR, Y1MRTC	MY29	Y35, Y35BH, Y39, Y39BH, Y750, Y750-2, Y750BH, Y750HS, Y750BH-2, PAT750, BAT750, BAT35	Y45⑥, Y46⑥	Y644M, Y644HS, Y644MBH, PAT644, BAT644	VC6	TDY-1	1989
Die Part Number/Color Code and Die Index Number/(Number of Crimps)										
—	—	—	—	—	—	—	—	—	—	—
Red 21 (1)	STD (1)	Red 21 (1)	Red 49 (2)	#8 (1)	U8CRT Red 49 (1)	U8CRT Red 49 (1)	—	—	—	—
Blue 24 (1)	STD (1)	Blue 24 (1)	Blue 7 (2)	#6 (1)	U5CRT Blue 7 (1)	U5CRT Blue 7 (1)	STD (1)	STD (1)	—	—
Gray 29 (1)	STD (1)	Gray 29 (1)	Gray 8 (2)	#4 (1)	U4CRT Gray 8 (1)	U4CRT Gray 8 (1)	STD (1)	STD (1)	—	STD (1)
Brown 33 (1)	STD (1)	Brown 33 (1)	Brown 10 (2)	#2 (1)	U2CRT Brown 9 (solid)/ Brown 10 (stranded) (2)	U2CRT Brown 9 (solid)/ Brown 10 (stranded) (2)	STD (1)	STD (1)	STD (1)	STD (1)
Green 37 (1)	STD (1)	Green 37 (1)	—	#1 (1)	U1CRT Green 11 (2)	U1CRT Green 11 (2)	STD (1)	STD (1)	STD (1)	STD (1)
Pink 42H② (4)	STD (2)	Pink 42H② (4)	—	1/0 (2)	U25RT Pink 12 (2)	U25RT Pink 12 (2)	STD (1)	STD (1)	STD (1)	STD (1)
Black 45 (2)	STD (2)	Black 45 (2)	—	2/0 (2)	U26RT Black 13 (2)	U26RT Black 13 (2)	STD (1)	STD (1)	STD (1)	STD (1)
Orange 50 (2)	STD (2)	Orange 50 (2)	—	3/0 (2)	U27RT Orange 14 (2)	U27RT Orange 14 (2)	STD (1)	STD (2)	STD (1)	STD (1)
Purple 54H② (4)	STD (2)	Purple 54H② (4)	—	4/0 (2)	U28RT Purple 15 (2)	U28RT Purple 15 (2)	STD (1)	STD (2)	STD (1)	STD (1)
Yellow 62 (2)	STD (2)	Yellow 62 (2)	—	250 (2)	U29RT Yellow 16 (2)	U29RT Yellow 16 (2)	STD (1)	STD (2)	STD (1)	STD (1)

①The CT-1700 and CT-1701 crimp die pockets are integrated into the tool frame.
②Half width dies.
③CD-920 dies can be used with CT-940CH and CT-2940 tools with CD-940-DA adapter.
④Maximum size: 500 kcmil lugs.
⑤Maximum size: 250 kcmil lugs.
⑥Requires U die adapter.
⑦Minimum size: #4 AWG lugs.
⑧Extended wire range when crimped with these *PANDUIT® UNI-DIE™* Dieless Crimping Tools.

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For use with Copper Conductors

Installation Tooling and Die Selections for Type LCCX

PANDUIT Part Number	Std. Wire Size	Cable Classes	Wire Strip Length (In.)	*PANDUIT*		
				CT-1700①	CT-2001, CT-2002	CT-920, CT-920CH, CT-2920, CT-930, CT-930CH, CT-2930, CT-2931, CT-2931/E, CT-2940②, CT-940CH②
				Die Part Number/Color Code and Die Index Number/(Number of Crimps)		
LCCX8	#8 AWG	Compact, B, G, H, I, K, M, Locomotive (DLO)	3/4	Red P21 (3)	CD-2001-8 Red P21 (2)	CD-920-8 Red P21 (1)
LCCX6	#6 AWG	Compact, B, G, H, I, K, M, Locomotive (DLO)	1 1/8	Blue P24 (3)	CD-2001-6 Blue P24 (2)	CD-920-6 Blue P24 (1)
LCCX4	#4 AWG	Compact, B, G, H, I, K, M	1 1/8	Gray P29 (3)	CD-2001-4 Gray P29 (2)	CD-920-4 Gray P29 (1)
	#5, #4, #3 AWG	Locomotive (DLO)				
LCCX2	#2 AWG	Compact, B, G, H, I, K, M, Locomotive (DLO)④⑤	1 7/16	Brown P33 (3)	CD-2001-2 Brown P33 (2)	CD-920-2 Brown P33 (1)
LCCX1	#1 AWG	Compact, B, G, H, I, K, M, Locomotive (DLO)⑥	1 1/2	—	CD-2001-1 Green P37 (2)	CD-920-1 Green P37 (2)
LCCX1/0	1/0 AWG	Compact, B, G, H, I, K, M, Locomotive (DLO)	1 9/16	—	CD-2001-1/0 Pink P42 (3)	CD-920-1/0 Pink P42 (3)
LCCX2/0	2/0 AWG	Compact, B, G, H, I, K, M, Locomotive (DLO)⑦	1 9/16	—	CD-2001-2/0 Black P45 (3)	CD-920-2/0 Black P45 (3)
LCCX3/0	3/0 AWG	Compact, B, G, H, I, K, M, Locomotive (DLO)⑤	1 5/8	—	CD-2001-3/0 Orange P50 (3)	CD-920-3/0 Orange P50 (3)
LCCX4/0	4/0 AWG	Compact, B, G, H, I, K, M, Locomotive (DLO)⑤	2 5/16	—	CD-2001-4/0 Purple P54 (3)	CD-920-4/0 Purple P54 (3)
LCCX250	250 kcmil	G, H, I, K, M	2 5/16	—	CD-2001-250 Yellow P62 (3)	CD-920-250 Yellow P62 (3)
	262.6 kcmil	Locomotive (DLO)				

①The CT-1700 crimp die pockets are integrated into the tool frame.
②CD-920 dies can be used with CT-940CH and CT-2940 tools with CD-940-DA adapter.
③Requires U die adapter.
④Does not include class K Flex Conductor with Burndy tools.
⑤Does not include class M Flex Conductor with T&B tools.
⑥Does not include class K and M Flex Conductor with T&B tools.
⑦Does not include class K Flex Conductor with T&B tools.

Prime items appear in **BOLD**.

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Installation Tooling and Die Selections for Type LCCX (continued)

Thomas & Betts						Burndy			
TBM12	TBM8	TBM6, 25000	TBM6BSCR, TBM6H	TBM8-750, TBM8-750M-1	TBM14BSCR, TBM14M, TBM15	BCT500HS, Y500CT-HS	Y644M	Y35, Y39, Y750, Y46③, Y750-2, Y750BH, BAT35-14V, BAT750-14V, PAT750-18V	MRC840
Die Part Number/Color Code and Die Index Number/(Number of Crimps)									
TBM12D-1 Red 21 (2)	13461 Red 21 (2)	13475 and 13477 Red 21 (2)	6TON21 Red 21 (2)	STD (2)	15520 Red 21 (2)	W8CRT Red 49 (2)	—	U8CRT Red 49 (2)	Red 49 (2)
TBM12D-1 Blue 24 (2)	13461 Blue 24 (2)	13475 and 13477 Blue 24 (2)	6TON24 Blue 24 (2)	STD (2)	15522 Blue 24 (2)	W5CRT Blue 7 (2)	(2)	U5CRT Blue 7 (2)	Blue 7 (2)
TBM12D-2 Gray 29 (3)	13461 Gray 29 (2)	13472 and 13476 Gray 29 (3)	6TON29 Gray 29 (2)	STD (3)	15527-CK Gray 29 (2)	W4CRT Gray 8 (2)	(2)	U4CRT Gray 8 (2)	—
TBM12D-2 Brown 33 (3)	13461 Brown 33 (3)	13474 and 13477 Brown 33 (3)	6TON33 Brown 33 (2)	STD (3)	15528 Brown 33 (2)	W2CRT Brown 10 (2)	(2)	U2CRT Brown 10 (2)	—
TBM12D-3 Green 37 (3)	13462 Green 37 (3)	13474 and 13477 Green 37 (3)	6TON37 Green 37 (2)	STD (3)	15513-CK Green 37 (2)	W1CRT-1 Green 11 (2)	(2)	U1CRT Green 11 (2)	—
TBM12D-3 Pink 42 (3)	13462 Pink 42 (3)	13475 and 13477 Pink 42 (3)	6TON42 Pink 42 (3)	STD (3)	15508 Pink 42 (3)	W25RT Pink 12 (3)	(2)	U25RT Pink 12 (2)	—
TBM12D-4 Blk/Gold 45 (3)	13462 Black 45 (4)	13474 and 13477 Black 45 (3)	6TON45 Black 45 (3)	STD (3)	15526 Black 45 (2)	W26RT Black 13 (3)	(2)	U26RT Black 13 (2)	—
TBM12D-4 Org/Tan 50 (3)	13462 Orange 50 (4)	13474 and 13477 Orange 50 (3)	6TON50 Orange 50 (3)	STD (3)	15530 Orange 50 (3)	W27RT Orange 14 (4)	(2)	U27RT Orange 14 (2)	—
TBM12D-5 Purp/Olive 54 (4)	—	—	6TON54 Purple 54 (4)	STD (4)	15511 Purple 54 (4)	W28RT Purple 15 (4)	(3)	U28RT Purple 15 (3)	—
TBM12D-5 Yellow 62 (3)	—	—	6TON62 Yellow 62 (4)	STD (4)	15510-CK Yellow 62 (2)	W29RT Yellow 16 (4)	(3)	U29RT Yellow 16 (3)	—

①The CT-1700 crimp die pockets are integrated into the tool frame.
②CD-920 dies can be used with CT-940CH and CT-2940 tools with CD-940-DA adapter.
③Requires U die adapter.
④Does not include class K Flex Conductor with Burndy tools.
⑤Does not include class M Flex Conductor with T&B tools.
⑥Does not include class K and M Flex Conductor with T&B tools.
⑦Does not include class K Flex Conductor with T&B tools.

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For use with Copper Conductors

Installation Tooling and Die Selections for Type CTAPF

PANDUIT Part Number	Stranded Wire Size		*PANDUIT*			
			1700①	CT-920, CT-920CH, CT-2920, CT-930, CT-930CH, CT-2930, CT-2931, CT-940CH②, CT-2940②	CT-2001, CT-2002	
	Main	Tap	Die Part Number/Color Code and Die Index Number/ (Number of Crimps)			
CTAPF4-12	#6 AWG	#8 – #6 AWG	Brown P33 (4)	CDM-920-2 Brown P33M (1)	CDM-2001-2 Brown P33M (1)	CD-2001-2 Brown P33 (2)
	#5, #4 AWG	#12 – #8 AWG				
CTAPF3-12	#5, #4 AWG	#6 – #5 AWG	Green P37 (4)	CDM-920-1 Green P37M (1)	CDM-2001-1 Green P37M (1)	CD-2001-1 Green P37 (2)
	#3 AWG	#12 – #6 AWG				
CTAPF2-12	#4 AWG	#4 AWG	—	CDM-920-1/0 Pink P42M (1)	CDM-2001-1/0 Pink P42M (1)	CD-2001-1/0 Pink P42 (2)
	#3 AWG	#5 AWG				
	#2 AWG	#12 – #6 AWG				
CTAPF1-12	#3 AWG	#4 – #3 AWG	—	CDM-920-2/0 Black P45M (1)	CDM-2001-2/0 Black P45M (2)	CD-2001-2/0 Black P45 (3)
	#2 AWG	#5 – #4 AWG				
	#1 AWG	#12 – #5 AWG				
CTAPF1/0-12	#2 AWG	#4 – #2 AWG	—	CDM-920-3/0 Orange P50M (1)	CDM-2001-3/0 Orange P50M (2)	CD-2001-3/0 Orange P50 (3)
	#1 AWG	#4 – #3 AWG				
	1/0 AWG	#12 – #4 AWG				
CTAPF2/0-12	#1 AWG	#2 – #1 AWG	—	CDM-920-4/0 Purple P54M (1)	—	CD-2001-4/0 Purple P54 (3)
	1/0 AWG	#3 – #2 AWG				
	2/0 AWG	#12 – #3 AWG				
CTAPF3/0-12	1/0 AWG	#1 – 1/0 AWG	—	CDM-920-250 Yellow P62M (1)	—	CD-2001-250 Yellow P62 (3)
	2/0 AWG	#2 – #1 AWG				
	3/0 AWG	#12 – #2 AWG				

①The CT-1700 crimp die pockets are integrated into the tool frame.
②CD-920 dies can be used with CT-940CH and CT-2940 tools with CD-940-DA adapter.

Prime items appear in **BOLD**.

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Installation Tooling and Die Selections for Type CTAPF (continued)

PANDUIT Part Number	Stranded Wire Size		Burndy		Thomas & Betts
			Y35, Y39, Y45, Y46, Y750BH-2 Y750, BAT35, BAT750, Y35BH, Y39BH, Y750BH, Y750HS, PAT750, Y750-2	Y500CT-HS, BCT500-HS, BCT500,Y500CT	TBM8-750, TBM8-750M-1, TBMB-750BSCR
	Main	Tap	Die Part Number/Color Code and Die Index Number/ (Number of Crimps)		
CTAPF4-12	#6 AWG	#8 – #6 AWG	UC4 Brown 10M (1)	WC4 Brown 10M (1)	TBM8-750C20 (1)
	#5, #4 AWG	#12 – #8 AWG			
CTAPF3-12	#5, #4 AWG	#6 – #5 AWG	—	—	TBM8-750C2530 (1)
	#3 AWG	#12 – #6 AWG			
CTAPF2-12	#4 AWG	#4 AWG	UC2 Pink 12M (1)	WC2 Pink 12M (1)	TBM8-750C2530 (1)
	#3 AWG	#5 AWG			
	#2 AWG	#12 – #6 AWG			
CTAPF1-12	#3 AWG	#4 – #3 AWG	UC1 Black 13M (1)	WC1 Black 13M (2)	TBM8-750C3540 (1)
	#2 AWG	#5 – #4 AWG			
	#1 AWG	#12 – #5 AWG			
CTAPF1/0-12	#2 AWG	#4 – #2 AWG	UC25 Orange 14M (1)	WC25 Orange 14M (2)	TBM8-750C3540 (1)
	#1 AWG	#4 – #3 AWG			
	1/0 AWG	#12 – #4 AWG			
CTAPF2/0-12	#1 AWG	#2 – #1 AWG	—	—	TBM8-750C4550 (1)
	1/0 AWG	#3 – #2 AWG			
	2/0 AWG	#12 – #3 AWG			
CTAPF3/0-12	1/0 AWG	#1 – 1/0 AWG	—	—	TBM8-750C4550 (1)
	2/0 AWG	#2 – #1 AWG			
	3/0 AWG	#12 – #2 AWG			

①The CT-1700 crimp die pockets are integrated into the tool frame.
②CD-920 dies can be used with CT-940CH and CT-2940 tools with CD-940-DA adapter.

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For use with Copper Conductors

Installation Tooling and Die Selections for Type HTCT

PANDUIT Part Number	Copper Conductor Sizes (Code Cable) Main	Tap 1	Tap 2	Tap 3	Copper Conductor Sizes (Flex Cable) Types G, H, I, K, M and Locomotive (DLO) Main	Tap 1	Tap 2	Tap 3	Crimp Die Color Code	Installation Tools 15 Ton	14 Ton	12 Ton
										PANDUIT		
										CT-940CH① CT-2940①	CT-930 CT-930CH CT-2930	CT-920 CT-920CH CT-2920 CT-2931 CT-2931/E
										Burndy		
										Y46①, Y46C①	—	Y35, Y35-2, Y35BH, Y35BH-4, Y750, Y39, Y39BH, Y750-2, Y750BH, Y750BH-2, Y750HS, BAT35, BAT750, BAT750C, PAT750, PAT750C
										Thomas & Betts		
										TBM15I, TBM15BSCR	TBM14M, TBM14BSCR, BPLT14BSCR, 13100A	—
										***PANDUIT* Crimp Die Part Number/Die Index No. (Number of Crimps = 1)**		
HTCT6-6	#6 – #10 AWG	#6 – #14 AWG	—	—	#6 – #10 AWG	#6 – #14 AWG	—	—	Orange	CD-920H-6 PH6	CD-920H-6 PH6	CD-920H-6 PH6
HTCT2-2	#2 – #6 AWG STR/SOL	#2 – #6 AWG STR/SOL	#8 – #14 AWG	#8 – #14 AWG	#2 – #8 AWG	#2 – #8 AWG	#8 – #14 AWG	#8 – #14 AWG	Brown	CD-920H-2 PH2	CD-920H-2 PH2	CD-920H-2 PH2
HTCT250-2	250 kcmil – #2 AWG	#2 – #6 AWG STR/SOL	#8 – #14 AWG	—	4/0 – #2 AWG	#2 – #8 AWG	#8 – #14 AWG	—	Purple	CD-930H-250 PH25	CD-930H-250 PH25	CD-930H-250 PH25
HTCT250-250	250 kcmil – #2 AWG	250 kcmil – #2 AWG	—	—	4/0 – #2 AWG	4/0 – #2 AWG	—	—	Purple	CD-930H-250 PH25	CD-930H-250 PH25	CD-930H-250 PH25

①CD-920H and CD-930H dies can be used with CT-940CH and CT-2940 *PANDUIT* tools and Y46 and Y46C Burndy tools with CD-940-DA adapter.
PANDUIT crimping dies must be used with all tooling (*PANDUIT* and competitor) to maintain UL/CSA certifications for applications up to 600 V.

Prime items appear in **BOLD**.

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MANAGED SYSTEM SOLUTIONS







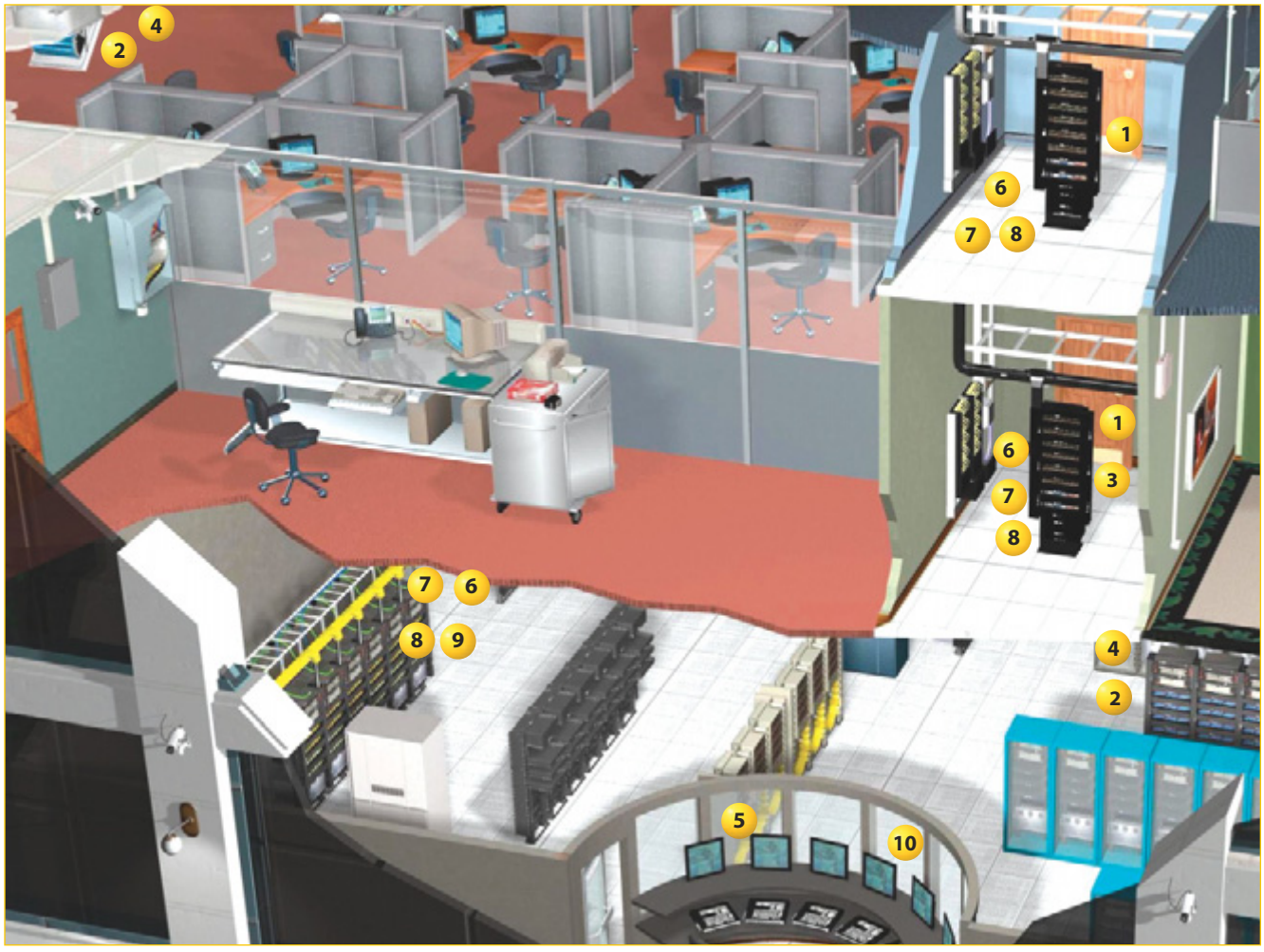
As networks continue to grow, so do the demands placed upon them. Today, networks have become the backbone of organizations relying on them to automate business operations and processes, provide security, and to service customers. As such, management, maintenance, and monitoring of the network have taken on new levels of importance – requiring hardware and software applications to ensure security, performance, and reliability. To address these challenges, *PANDUIT* offers *DPoE*™ Power over Ethernet Systems for the cost-effective deployment of Power over Ethernet (PoE), and the *PANVIEW*™ System for intelligent physical layer management.

- **Space-saving designs allow for deployment in space-constrained locations**
- **Enable network modularity and scalability to grow a network as needed**
- **Provide redundant powering to reduce risk and diminish downtime**
- **Provide real-time information of network status and ensure connectivity**
- **Facilitate planning, implementation, and documentation of connectivity moves, adds, or changes**
- **Monitor and alert administrators of any patch field changes or potential security risks**

DPoE™ Power over Ethernet Systems and the *PANVIEW*™ System are easily integrated into new and existing networks and offer a broad range of solutions that offer networks the benefits of security, reliability, and scalability.

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Managed System Solutions Roadmap



1 *DPoE*™ Power Patch Panels (page D1.6)



2 *DPoE*™ Power Midspan (page D1.7)



3 *DPoE*™ Power System (page D1.8)



4 *DPoE*™ Power Supply (page D1.7)



5 *DPoE*™ Element Manager



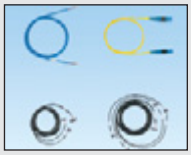
6 *PANVIEW*™ Hardware (page D1.3)



7 *PANVIEW*™ Patch Panels (page D1.3)



8 *PANVIEW*™ Patch Cords and Attachment Cords (page D1.4)



9 *PANVIEW*™ Accessories (page D1.5)



10 *PANVIEW*™ Software (page D1.5)



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PANVIEW™ Hardware

- Provides real-time information on patch field connection status
- Consolidates data and updates management station with status or alerts as necessary
- Provides flexible and scalable solutions for intelligent physical layer management



PVMM4PY



PVMEY



PVMSY

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
PVMM4PY	Master 4-port.	1	1
PVMEY	Expander.	1	1
PVMMEY	Master expander.	1	1
PVMSY	Scanner.	1	1
PVMMSY	Mini-scanner.	1	1
PVMLSY	Local scanner.	1	1

^One rack space = 1.75" (44.45mm).
PANVIEW™ Hardware requires proper A.C. country specific power cord (Cord-A for Australia, Cord-E for Europe, Cord-S for United States or Cord-U for United Kingdom) must be ordered separately.

PANVIEW™ Patch Panels

- Provide flat and angled patch panel solutions
- Accept MINI-COM® Modules for UTP and STP (including Category 5e, Category 6, and 10GIG™) and Fiber Optic, which snap in and out for easy moves, adds, and changes
- LEDs above each patch panel port guide technicians through patch cord changes
- Provide versatility, flexibility, and industry-leading connectivity performance

ULTIMATE ID



PVMPU246GKY



PVMAPU246GKY



PVSFMT1-6

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
PVMPU24UY	24-port UTP modular patch panel blank.	1	1	10
PVMPU246GKY	24-port UTP modular patch panel with TX6™ PLUS Jack Modules.	1	1	10
PVMPU246XKY	24-port UTP modular patch panel with TX6™ 10GIG™ Jack Modules.	1	1	10
PVMAPU24Y	24-port UTP angled modular patch panel blank.	1	1	10
PVMAPU246GKY	24-port UTP angled modular patch panel with TX6™ PLUS Jack Modules.	1	1	10
PVMAPU246XKY	24-port UTP angled modular patch panel with TX6™ 10GIG™ Jack Modules.	1	1	10
PVSFMT1	24-port split fiber tray blank.	1	1	1
PVSFMT1-6	24-port split fiber tray with MM kit.	1	1	1
PVSFMT1-X	24-port split fiber tray with MM phosphor bronze 10GIG™ Jack Modules.	1	1	1
PVSFMT1-9	24-port split fiber tray with SM zirconia ceramic jack modules.	1	1	1
PVSFMT1-ZX	24-port split fiber tray with MM zirconia ceramic 10GIG™ Jack Modules.	1	1	1

^One rack space = 1.75" (44.45mm).

Component Labels for PANVIEW™ Patch Panels



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Panel Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
All Patch Panels on Page D1.3	UILJ4	—	UILS8BW	UILS8BW

For complete ULTIMATE ID® Labeling Solutions and product information, reference charts on page F1.8.

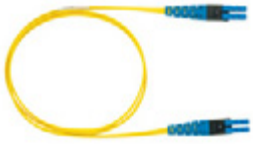
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PANVIEW™ Patch Cords and Attachment Cords

- Support copper and fiber installations with a range of lengths and colors
- Provide wide range of connectivity solutions between intelligent patch panels and active scanners
- Attachment cord lengths allow for convenient placement in rack installations up to 12m distance



PVUTPSPC*BBUY



PVF9L10-10M*Y



PVRACB*MY



PVRACBY*MY

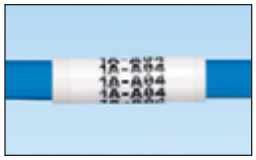


PVSTP6X*MBBU

Part Number	Part Description	Length^ Ft.	Length^ M	Std. Pkg. Qty.	Std. Ctn. Qty.
PVUTPSPC3BBUY	Category 6 UTP modular patch cord for use with modular patch panel.	3	—	1	10
PVUTPSPC1MBBUY	Category 6 UTP modular patch cord for use with modular patch panel.	—	1	1	10
PVF9L10-10M0.5Y	Singlemode LSZH LC-LC patch cord.	—	.5	1	10
PVFXL10-10M0.5Y	50 micron LSZH OM3 LC-LC patch cord.	—	.5	1	10
PVFACA1.5MY	Flat attachment cord type A.	—	1.5	1	25
PVFACA2.5MY	Flat attachment cord type A.	—	2.5	1	25
PVFACB1.5MY	Flat attachment cord type B.	—	1.5	1	25
PVFACB2.5MY	Flat attachment cord type B.	—	2.5	1	25
PVRACA1.5MY	Round attachment cord type A.	—	1.5	1	25
PVRACA2.5MY	Round attachment cord type A.	—	2.5	1	25
PVRACB1.5MY	Round attachment cord type B.	—	1.5	1	25
PVRACB2.5MY	Round attachment cord type B.	—	2.5	1	25
PVRACA0.2MY	UTP splitter cable type A.	—	.2	1	25
PVRACBY5MY	Round Y attachment cord type B.	—	5	1	10
PVSTP6X1MBBU	Augmented, Category 6, STP modular *10GIG*™ Patch Cord.	—	1	1	10

^Additional lengths available: PVUTPSPC3BBUY also available in lengths of 5', 7', 9', 14' and 20'. PVUTPSPC1MBBUY also available in lengths of 2m, 3m, 5m, 7m and 10m. PVSTP6X1MBBU also available in lengths of 2m, 3m, 5m and 10m and in the colors green, red, and yellow. PVF9L10-10M0.5Y also available in 1/2m increments up to 10m. PVFXL10-10M0.5Y also available in 1/2m increments up to 10m. PVRACBY5MY also available in lengths of 8m and 11m. Contact Customer *PANDUIT* Customer Service for lead times.

Cable Labels for PANVIEW™ Patch Cords and Attachment Cords



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Cord Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	**PANTHER™ LS8E Hand-Held Printer Label**	**COUGAR™ LS9 Hand-Held Printer Label**
All Patch Cords and Attachment Cords on Page D1.4	**S100X150YAJ**	**S100X150VATY**	**S100X150VAC**	**T100X000CBC-BK**

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PANVIEW™ Accessories

- Visible rack systems indicators call attention to critical changes in a work area or to signal an alarm if necessary
- Offer directional control pad for manual patch cord tracing and selection of work orders



PVMICY



PVMRIY



PVMCPY

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.	Std. Ctn. Qty.
PVMICY	Indicator controller.	1	1	1
PVMRIY	Rack indicator.	—	1	15
PVMCPY	Control pad.	—	1	1
PVMSPY	Splitter.	—	1	30

^One rack space = 1.75" (44.45mm).

PANVIEW™ Software

- Includes security modules for monitoring, reporting, and updating of patch field connectivity
- Includes work order modules that streamline moves, adds, and changes
- Includes utilization modules that document asset utilization and track movement of network assets
- Provides scalable options for small to large businesses



PVSCD4.1



PVSCAD4.1

Part Number	Part Description	Std. Pkg. Qty.
PVSCD4.1	Software CD v4.1.	1
PVS4.1-1K*	v4.1 software license for 1,000 ports.	—
PVS4.1APL-1K**	v4.1 software additional port license for 1,000 ports.	—
PVS4.1UG3	Software v4.1 upgrade license from version 3.x.	—
PVS4.1UG4	Software v4.1 upgrade license from version 4.0.	—
PVSCAD4.1	CAD integration module for v4.1.	1
PVSPBX4.1	PBX integration module for v4.1.	—

*Additional ports availability: Ports are also available in 2, 5, 10, 20 and 30 thousand. To order additional ports other than 1K, replace the 1 suffix in the part number (PVS4.1-1K) with the desired port quantity (PVS4.1-5K for 5,000 ports).
**Additional ports availability: Ports are available in increments of 1,000 up to 20,000. To order additional ports other than 1K, replace the 1 suffix in the part number (PVS4.1APL-1K) with the desired port quantity (PVS4.1APL-5K for 5,000 additional ports).

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DPoE™ Power Patch Panels

- Deliver reliable, cost-effective Power over Ethernet for permanent installations
- Combine patching and power in a single device, occupying only one rack space
- Support 15.4 W to every port
- Fully compliant with IEEE 802.3af standards
- Eliminate power budget load balancing
- Offer RJ45 terminations with LEDs on front of panels to indicate port powering or port status and 110 punchdown terminations on rear of panel for networking management connections
- Dissipate significantly less heat than comparable network equipment

ULTIMATE ID



DPOE24U1XY



DPOE12U1XY



DPOE24S1XY

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
DPOE24U1XY	24-port UTP 10/100 patch panel supporting IEEE 802.3af-2003 and Legacy PoE Power protocols. Includes Element Manager software CD, rack mount screws, grounding strap and lug.	1	1
DPOE12U1XY	12-port UTP 10/100 patch panel supporting IEEE 802.3af-2003 and Legacy PoE Power protocols. Includes Element Manager software CD, rack mount screws, grounding strap and lug.	1	1
DPOE24S1XY	24-port STP 10/100 patch panel supporting IEEE 802.3af-2003 and Legacy PoE Power protocols. Includes Element Manager software CD, rack mount screws, grounding shell, grounding strap and lug.	1	1
DPOE24U1XG	24-port UTP 1 GbE 10/100/1000 patch panel supporting IEEE 802.3af-2003 and Legacy PoE Power protocols. Includes Element Manager software CD, rack mount screws, grounding strap and lug.	1	1

^One rack space = 1.75" (44.45mm).
Strain relief bars for mounting can be found on page C1.24.

Component Labels for *DPoE*™ Power Patch Panels



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Patch Panel Part Number	**Laser/Ink Jet Desktop Printer Label**	**TDP43MY Thermal Transfer Desktop Printer Label**	***PANTHER*™ LS8E Hand-Held Printer Label**	***COUGAR*™ LS9 Hand-Held Printer Label**
All Patch Panels on Page D1.6	**UILJ6**	—	**UILS8BW**	**UILS8BW**

For complete *ULTIMATE ID*® Labeling Solutions and product information, reference charts on page F1.8.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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DPoE™ Power Midspan

- Delivers reliable, cost-effective Power over Ethernet to new or existing networks
- Supports up to 32 W (2X Power) to every port
- Fully compliant with IEEE 802.3af standards
- Compact, modular design allows up to three units to fit horizontally across one rack space
- Dissipates significantly less heat than comparable network equipment
- Scalable to grow network as needed

ULTIMATE ID


DPOE8S2XG


DPOEWM8B


DPOEPL8BU


DPOESHELF


DPOE8KIT

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
DPOE8S2XG	8-port STP 10/100/1000 midspan supporting IEEE 802.3af-2003 and Legacy PoE protocols. Option for table top mounting, wall bracket, or 1 RU shelf. Includes Support Tools CD with Element Manager software.	1	1
DPOEWM8B	Wall mount bracket for DPOE8S2XG.	1	1
DPOEPL8BU	8-port passive patch panel module.	1	1
DPOESHELF	1 RU shelf for DPOE8S2XG.	1	1
DPOE8KIT	Compact 8 midspan kit includes individual unit, 120 W power supply, and 15 A conductor power cord.	1	1

^One rack space = 1.75" (44.45mm).

DPoE™ Power Supply

- Provides up to 120 W of regulated power
- Offers flexible placement inside of rack
- Removes AC to DC power conversion heat from power patch panels due to isolation
- LED indicates when power is being supplied to the panel



Part Number	Part Description	Std. Pkg. Qty.
DPOEPWRB120Y	120 W power supply. Suitable for single unit power installations with low power needs or a mixture of active and passive devices.	1

Power supply requires proper A.C. country specific power cord (Cord-A for Australia, Cord-E for Europe, Cord-S for United States, or Cord-U for United Kingdom) must be ordered separately.

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A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

DPoE™ Power System

- Offers 48 VDC power that is scalable from 500 W to 3,750 W
- Utilizes high efficiency power supplies that can be hot swapped for upgrades or replacement without taking the entire system down
- Provides consistent powering across a wide range of devices and application needs
- Offers a low profile, one rack space design
- Emits 35% less heat compared to other power supply systems
- Increases reliability with problem fault isolation



DPOEPWRCU



DPOEPWRR500/ DPOEPWRR1250

Part Number	Part Description	No. of Rack Spaces^	Std. Pkg. Qty.
DPOEPWRCU	Power system chassis. Utilized for supplying power to single and multiple power patch panels when equipped with the appropriate *DPoE*™ Power Rectifiers.	1	1
DPOEPWRR500	500 W power rectifier supplies power for multiple power patch panels. A combination of three rectifiers will support four to seven panels. Used with DPOEPWRCU.	—	1
DPOEPWRR1250	1250 W power rectifier supplies power for multiple power patch panels. A combination of three rectifiers will support up to fourteen panels. Used with DPOEPWRCU.	—	1

^One rack space = 1.75" (44.45mm).
Power system chassis requires proper A.C. country specific power cord (Cord-A for Australia, Cord-E for Europe, Cord-S for United States, or Cord-U for United Kingdom) must be ordered separately.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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INDUSTRIAL

The *PANDUIT*® *INDUSTRIALNET*™ Solution is a reliable, high performance network cabling infrastructure designed to support industrial networking applications in harsh factory environments. IP (ingress protection) and NEMA (National Electrical Manufacturers Association) rated products, including "hardened" network connectivity, withstand the harsh conditions encountered in industrial automation and industrial Ethernet applications.





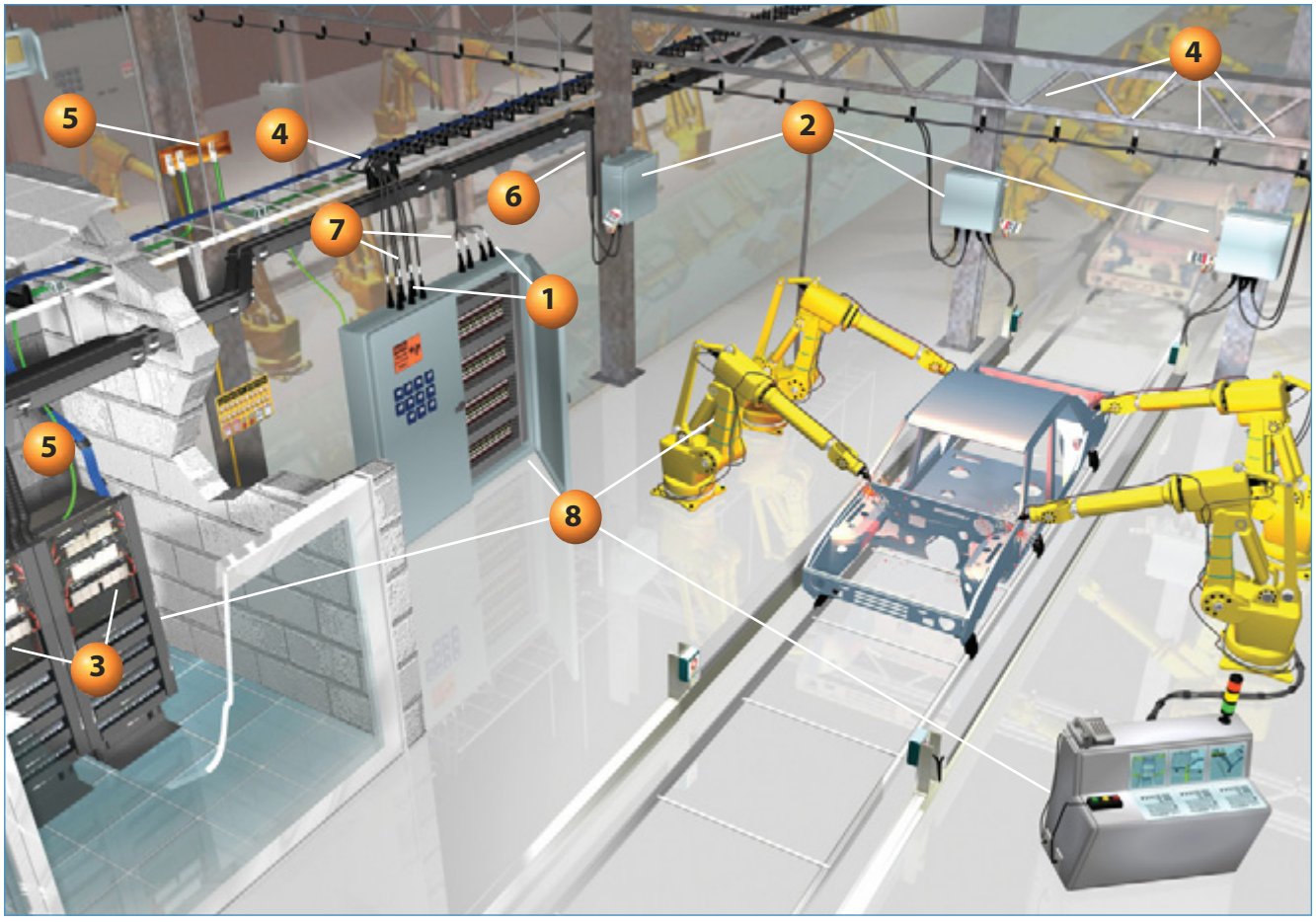


- **Connectors rated for factory and harsh environments – NEMA 6, 6P and IP67/IP65**
- **Enclosures rated for factory and harsh environments – NEMA 4 and IP66**
- **Fully integrated solution with proven interoperability from the enterprise to the industrial network**
- **Reduced cost of ownership for design, installation, and the management of industrial networking**

The *INDUSTRIALNET*™ Solution includes *INDUSTRIALNET*™ *TX6*™, *TX5E*™ Connectors, *INDUSTRIALNET*™ *TX5E*™ Patch Cords, *INDUSTRIALNET*™ LC Fiber Optic Bulkhead Adapter and Patch Cords, *INDUSTRIALNET*™ Stainless Steel Faceplates, and the *INDUSTRIALNET*™ Ethernet Enclosure.

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Industrial System Roadmap



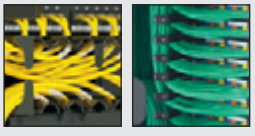
1 *INDUSTRIALNET*™ Connectors and Patch Cords (see pages E1.3 – E1.7)



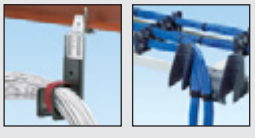
2 *INDUSTRIALNET*™ Ethernet Enclosure (see page E1.6)



3 Cabinets, Racks, and Cable Management (see pages C4.1 – C4.29)



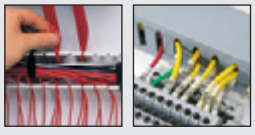
4 Cable Management Accessories (see pages C4.29 – C4.38)



5 Power and Grounding Connectors (see pages C5.1 - C5.48)



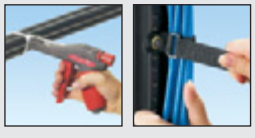
6 Wiring Duct (see pages F2.1 – F2.16)



7 Identification Systems (see pages F1.1 – F1.18)



8 Cable Ties (see pages F3.1 – F3.24)



Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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INDUSTRIALNET™ TX6™ Connectors

- IP67/IP65, NEMA 6 and 6P sealed industrial Ethernet connectors
- Exceed TIA/EIA-568-B.2.1 Category 6 and ISO 11801 2nd Edition Class E standards
- Meet industrial Ethernet specifications from ODVA, TIA, and IEC sealed RJ45 connectors
- Utilize *PANDUIT* patented enhanced *GIGA-TX*™ Termination technique for consistent, reliable terminations
- Jack module terminates 4-pair 22 – 26 AWG solid and stranded twisted pair cable
- Gasket and seal made of inert, chemically resistant material
- Connector components are made of high temperature rated material
- Tethered caps maintain seal during unmated connection
- Compatible with leading switch manufacturers' equipment



IAECBH6S

Part Number	Description	Std. Pkg. Qty.	Std. Ctn. Qty.
INDUSTRIALNET™ TX6™ UTP Bulkhead Connector			
IAEBH6	Category 6, RJ45, 8-position, 8-wire black industrial bulkhead connector with protective cover.	1	10
INDUSTRIALNET™ TX6™ STP Bulkhead Connector			
IAEBH6S	Category 6, RJ45, 8-position, 8-wire shielded black industrial bulkhead connector with protective cover.	1	10

EGJT tool terminates enhanced *GIGA-TX*™ Style Jack Modules, available on page B2.19.
Not suitable for direct UV applications.

INDUSTRIALNET™ TX5e™ Connectors and Plugs

- IP67/IP65, NEMA 6, and 6P sealed industrial Ethernet connectors
- Exceed TIA/EIA-568-B.2 Category 5e and ISO 11801 2nd Edition Class D standards
- Meet the industrial Ethernet specifications from ODVA, TIA, and IEC for sealed RJ45 connectors
- Jack module utilizes *PANDUIT* patented *GIGA-TX*™ termination technique for consistent, reliable terminations
- Jack module terminates 4-pair 22 – 26 AWG solid and stranded twisted pair cable
- Plug terminates 24 gauge, stranded or solid conductor with maximum conductor insulation diameter of .040"
- Gasket and seal made of inert, chemically resistant material
- Connector components are made of high temperature rated material
- Tethered caps maintain seal during unmated connection
- Compatible with leading switch manufacturers' equipment



MPI588T



IAEBH5ES

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
INDUSTRIALNET™ TX5e™ UTP Bulkhead Connector			
IAEBH5E	Category 5e, 8-position, 8-wire industrial connector with protective cover.	1	10
INDUSTRIALNET™ TX5e™ UTP Plug			
MPI588T	Category 5e RJ45 industrial plug with protective cover.	1	10
INDUSTRIALNET™ TX5e™ STP Bulkhead Connector			
IAEBH5ES	Category 5e, 8-position, 8-wire shielded industrial connector with protective cover.	1	10
INDUSTRIALNET™ TX5e™ STP Plug			
MPSI588T	Category 5e, RJ45 shielded industrial plug with protective cover.	1	10

EGJT tool terminates enhanced *GIGA-TX*™ Style Jack Modules, available on page B2.19.
Not suitable for direct UV applications.

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NEW! INDUSTRIALNET™ TX6™ Coupler

- Provides convenient plug to plug connection point between the hardened switch and automation device
- IP67/IP65 sealed industrial Ethernet connectors
- Designed to exceed performance requirements of the TIA/EIA-568-B.2-1 Category 6 and ISO 11801 Class E channel standards
- Gasket and seal are made of inert, chemically resistant material
- Connector components are made of high temperature rated material
- Tethered caps maintain seal during unmated connection
- Compatible with leading switch manufacturers' equipment



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
IAEBHC6	Category 6, RJ45, 8-position, 8-wire black industrial bulkhead coupler with protective cover.	1	10

Not suitable for direct UV applications.

INDUSTRIALNET™ TX5e™ Coupler

- Provides convenient plug to plug connection point between the hardened switch and automation device
- IP67/IP65, NEMA 6, and 6P sealed industrial Ethernet connectors
- Designed to exceed performance requirements of the TIA/EIA-568-B.2 Category 5e and ISO 11801 2nd Edition Class D channel standards
- Gasket and seal are made of inert, chemically resistant material
- Connector components are made of high temperature rated material
- Tethered caps maintain seal during unmated connection
- Compatible with leading switch manufacturers' equipment



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
IAEBHC5E	Category 5e, RJ45, 8-position, 8-wire industrial black bulkhead coupler with protective cover.	1	10

Not suitable for direct UV applications.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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INDUSTRIALNET™ LC Fiber Optic Bulkhead Adapter and Patch Cords

- Bulkhead provides IP67 seal when mated to an IP67 plug
- INDUSTRIALNET™ Patch Cords are pre-terminated and provide IP67 seal when mated to IP67 bulkhead jacks
- Patch cords built with 62.5µm duplex multimode industrial-grade jacketed fiber cable
- Ideal for daisy-chaining hardened industrial switches between IP66 rated enclosures
- Pigtails are ideal for routing fiber through conduit
- Patch cords are 100% factory tested for insertion loss
- Insertion loss data is recorded for every multimode patch cord, providing lifetime traceability to a QC number, labeled on each patch cord



IAEF7JMA



IAEF617P-7PM1

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
INDUSTRIALNET™ LC Fiber Optic Bulkhead Adapter			
IAEF7JMA‡	Industrial LC fiber optic bulkhead adapter.	1	10
INDUSTRIALNET™ LC Fiber Optic Patch Cord and Pigtail			
IAEF617P-7PM1*	Industrial duplex multimode 62.5µm LC to LC patch cord.	1	10
IAEF617P-NM1**	Industrial duplex multimode 62.5µm LC to pigtail.	1	10

‡Bulkhead includes duplex multimode LC adapter with phosphor bronze split sleeves.
*Available in 1m, 2m, 3m, 10m, 20m and 30m lengths.
**Contact Customer Service for pigtail lengths and/or discrete length patch cords with LC fiber interface.

INDUSTRIALNET™ Stainless Steel Faceplates

- Accept INDUSTRIALNET™ Connectors and Adapters
- Impact resistant for light industrial environments
- Rear gasket provides tight seal



IAEFP1



IAEFP2-2G

Part Number	Part Description	No. of Module Spaces	Std. Pkg. Qty.	Std. Ctn. Qty.
IAEFP1	Vertical faceplate accepts one INDUSTRIALNET™ Bulkhead Connector or Adapter.	1	1	10
IAEFP2-2G	Double gang, vertical faceplate accepts two INDUSTRIALNET™ Bulkhead Connectors or Adapters.	2	1	10

All faceplates include mounting screws.

Component Labels for INDUSTRIALNET™ Stainless Steel Faceplates



Suggested Label Solutions for TIA/EIA-606-A Compliance				
Faceplate Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PANTHER™ LS8E Hand-Held Printer Label	COUGAR™ LS9 Hand-Held Printer Label
IAEFP1	C061X030FJJ	C061X030YPT	C061X030FJC	T031X000FJC-BK
IAEFP2-2G	2 – C061X030FJJ	2 – C061X030YPT	2 – C061X030FJC	T031X000FJC-BK

For complete labeling solutions and product information, reference charts on pages F1.5 – F1.12.

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INDUSTRIALNET™ Ethernet Enclosure and Accessories

- NEMA 4X/IP66 rated when used with one of the required gland plate options
- Accommodates populated or unpopulated gland plates (sold separately)
- 35mm DIN rail equipped for mounting of a hardened Industrial Ethernet switch and power supply: length 14 3/4" (375mm)
- Power supply included (115/230 V to 24 VDC) with built-in circuit breaker (installation required)
- Vibration mitigating back plate for improved switch integrity
- Four welded mounting flanges for convenient and secure installation
- Optional fan/filter kit available for enclosures in high temperature environments; enclosure is IP54 rated when the fan/filter kit is installed*
- Enclosure supplied with a cable routing accessory kit for copper
- Optional fiber uplink kits available for addition of fiber uplinks (sold separately)
- Enclosure latches are lockout capable and will accommodate shackle diameters 5/16" or smaller; *PANDUIT* lock part number PSL-3



IAEIP66 shown with IAECGP, IAEFK54, and IAEFKSC

Part Number	Part Description	Std. Pkg. Qty.
IAEIP66	Industrial Ethernet enclosure. Accepts one gland plate (required to achieve IP66 rating). Supplied with power supply (115/230 V to 24 VDC) and accessories kit. Dimensions: 18.50"H x 18.50"W x 8.00"D (470mm x 470mm x 203mm)	1
IAECGP	Industrial Ethernet connector gland plate. Fully populated with fourteen bulkhead fittings. Fourteen internal enclosure patchcords (IUEJGY) for twelve downlink ports and two copper uplink ports.	1
IAEBGP	Industrial Ethernet blank gland plate.	1
IAEFK54	Industrial Ethernet fan/filter kit. 24 VDC powered. Includes DIN rail mount thermostat. IP54 rated when fan/filter kit is installed.	1
IUTPCHBH1.25BL	Industrial Ethernet internal enclosure patch cords/bulkhead assembly. RJ45 plug to *INDUSTRIALNET*™ Bulkhead Connectors. UTP, solid wire, 15" in length. Used to connect switch to gland mounted bulkhead.	1
IAEFKSC	Industrial Ethernet SC fiber uplink kit allows termination of four SC connectors onto two duplex fiber uplinks and connection to the MT-RJ ports on the switch, while maintaining an IP67 rating.	1
IAEFKSP	Industrial Ethernet fiber uplink splice kit supports splicing of two duplex fiber uplinks to MT-RJ or SC ports on the switch, while maintaining an IP67 rating.	1

*Should fan kit (IAEFK54) be integrated into the enclosure (IAEIP66), the IP rating of the enclosure shall be reduced to IP54, unless enclosure and any active equipment is located in an environment containing conductive particles that have the potential to ignite with spark.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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INDUSTRIALNET™ TX5e™ Patch Cords

- Exceeds TIA/EIA-568-B.2 Category 5e and ISO 11801 Class D standards
- Constructed of industrial Category 5e, 24 AWG UTP solid cable and PAN-PLUG® Modular Plugs for superior performance
- Patch cords are 100% factory tested for insertion loss
- Plug contacts plated with 50 microinches of gold for improved durability
- Plug meets all applicable FCC part 68 Subpart F requirements and exceeds IEC 60603-7 specifications
- Bulkhead provides IP67/IP65 seal when mated to an IP67/IP65, NEMA 6 or 6P bulkhead connector
- Patch cords are pre-terminated and provide IP67/IP65 seal when mated to IP67/IP65 bulkhead connectors
- Available with caps and without



IUTPCH*BLY



IUTPCHNC*BLY

Part Number	Part Description	Length		Std. Pkg. Qty.	Std. Ctn. Qty.
		Ft.	m		
INDUSTRIALNET™ TX5e™ UTP Patch Cords					
IUTPCH3BLY	Category 5e, RJ45 patch cord constructed with industrial grade UTP solid cable.	3	—	1	10
IUTPCH5BLY		5	—	1	10
IUTPCH7BLY		7	—	1	10
IUTPCH10BLY		10	—	1	10
IUTPCH15BLY		15	—	1	10
IUTPCH20BLY		20	—	1	10
IUTPCHNC3BLY	Category 5e, RJ45 patch cord constructed with industrial grade UTP solid cable without dust caps.	3	—	1	10
IUTPCHNC5BLY		5	—	1	10
IUTPCHNC7BLY		7	—	1	10
IUTPCHNC10BLY		10	—	1	10
IUTPCHNC15BLY		15	—	1	10
IUTPCHNC20BLY		20	—	1	10
INDUSTRIALNET™ TX5e™ Shielded Patch Cords					
ISTPCH1MBLY	Patch cord constructed of industrial grade STP Category 5e solid cable with dust caps.	—	1	1	10
ISTPCH2MBLY		—	2	1	10
ISTPCH3MBLY		—	3	1	10
ISTPCH5MBLY		—	5	1	10
ISTPCHNC1MBLY	Patch cord constructed of industrial grade STP Category 5e solid cable.	—	1	1	10
ISTPCHNC2MBLY		—	2	1	10
ISTPCHNC3MBLY		—	3	1	10
ISTPCHNC5MBLY		—	5	1	10

Not suitable for direct UV applications.

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LABELING AND IDENTIFICATION

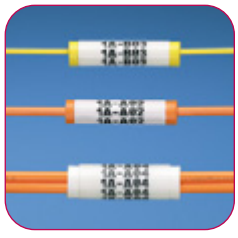
PANDUIT designs and manufactures a full line of labeling products, software, and printers to assist you with TIA/EIA-606-A compliance. Properly identifying your network allows moves, adds, changes, trouble shooting and repairs to be accomplished faster and more efficiently to lower the cost of ownership.











- **World-class quality – ISO 9001 and ISO 14001**
- **High performance and reliability**
- **Wide variety of system solutions to meet the most demanding requirements**
- **Meet or exceed the requirements of UL, CSA, and TIA/EIA-606-A**

Identification solutions are available to comply with TIA/EIA-606-A requirements. For recommended product information and labeling solutions, please refer to the following sections in this catalog: Cable; Modules; Work Area Outlet Solutions; Surface Raceway; Zone Cabling Systems; Wireless Solutions; Copper Patch Panels, Patch Cords, and Punchdowns; Fiber Connectors, Enclosures, and Patch Cords; Overhead and Underfloor Routing Systems; Cabinets, Racks, and Cable Management; Grounding and Bonding; Managed System Solutions; and Industrial.

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NEW! PANTHER™ LS8E Hand-Held Thermal Transfer Printer and Accessories

- Cut-to-length functionality eliminates label waste and label trimming labor
- Partial cut feature available to provide tear-apart strips of labels
- *P1*™ Label Cassette contains an integrated memory device for automatic formatting, recall of last legend used, and number of labels remaining in the cassette
- Market specific labeling tools simplify label creation for network components, panel building, and construction and maintenance
- USB interface for importing data, system upgrades, and printing from a wireless laptop or desktop computer
- Legends can be easily aligned with ports on patch panels and faceplates, eliminating the need for manual spacing and guesswork
- Prints self-laminating cable labels, continuous tapes, and die-cut labels for patch panels, faceplates, and other network applications
- Fast loading label cassette includes both label material and ribbon to make changing labels easy
- Large graphic display with backlight for improved visibility



LS8E



LS8E-KIT

Part Number	Part Description	Std. Pkg. Qty.
LS8E-KIT	Includes LS8E printer, one cassette of S100X150VAC self-laminating labels, six AA alkaline batteries, LS8-CASE, LS8-PCKIT, LS8-IB, LS8-WS and quick reference card.	1
LS8E	Includes LS8E printer, one cassette of S100X150VAC self-laminating labels, six AA alkaline batteries and quick reference card.	1
LS8E-ACS*	120 VAC power adapter for North America.	1
LS8-CASE	Rigid carrying case.	1
LS8-PCKIT	Includes USB cable and PC interface software for importing data, system upgrades, or printing from a wireless laptop or desktop computer.	1
LS8-IB	Protective impact bumper.	1
LS8-WS	Wrist strap.	1
LS8-CLN	Cleaning kit.	1

*Cannot be used to charge batteries.
*Other adapters available, replace S with A (Australia), C (China), E (Europe) and U (UK).
Reference chart of *P1*™ Label Cassettes for use with the LS8E can be found on pages F1.3 – F1.4.

NEW! COUGAR™ LS9 Hand-Held Thermal Transfer Printer and Accessories

- Economical identification system provides premium quality solutions at the lowest installed cost
- Cut-to-length functionality eliminates label waste and label trimming labor
- Partial cut feature available to provide tear-apart strips of labels
- *P1*™ Label Cassette contains an integrated memory device for automatic formatting, recall of last legend used, and number of labels remaining in the cassette
- Legends can be easily aligned with ports on patch panels and faceplates, eliminating the need for manual spacing and guesswork
- Prints a wide variety of continuous tapes for marking of wires/cables, patch panels, faceplates and other network applications
- Fast loading label cassette includes both label material and ribbon to make changing labels easy



LS9

Part Number	Part Description	Std. Pkg. Qty.
LS9	Includes LS9 printer, one cassette of T100X000VPC-BK continuous tape, six AA alkaline batteries and quick reference card.	1
LS9-ACS*	120 VAC power adapter for North America.	1
LS9-CASE	Rigid carrying case.	1
LS9-IB	Protective impact bumper.	1
LS9-WS	Wrist strap.	1
LS9-CLN	Cleaning kit.	1

*Cannot be used to charge batteries.
*Other adapters available, replace S with A (Australia), C (China), E (Europe) and U (UK).
Reference chart of *P1*™ Label Cassettes for use with the LS9 can be found on pages F1.3 – F1.4.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PANDUIT®

Hand-Held Thermal Transfer Printing Solutions



PANTHER™ LS8E



COUGAR™ LS9

	PANTHER™ LS8E	COUGAR™ LS9
Network Component Labels	Pages F1.3 – F1.4	
Self-Laminating Labels	Page F1.5	
Die-Cut Heat Shrink Tubing	Page F1.6	
Continuous Heat Shrink Tubing	Page F1.6	Page F1.6
Vinyl Cloth Continuous Tapes	Page F1.7	Page F1.7
Continuous Tapes	Page F1.7	Page F1.7
ULTIMATE ID® Labels	Page F1.8	Page F1.8

P1™ Network Component Label Cassettes for *PANTHER*™ LS8E Hand-Held Thermal Transfer Printer



- *P1*™ Label Cassette contains an integrated memory device for automatic formatting, recall of last legend used, and number of labels remaining in the cassette
- Fast loading label cassette includes both label material and ribbon to make changing labels easy
- Use for identifying patch panels, faceplates, punchdown blocks and other network systems hardware
- Die-cut labels designed to provide maximum aesthetic quality and appearance
- Available in adhesive polyolefin and non-adhesive polyester materials

Application Description	Typical Application Page	Code
Boxes – Surface Mount, Outlet, Hybrid	B3.24	BX
Faceplates	B3.3	FP
GP6™ Category 6 Punchdown Blocks	C1.33	GP
Jack Modules	B2.2	JM

Application Description	Typical Application Page	Code
Punchdown Blocks – 110	C1.38	PB
Patch Panels	C1.7	PP
Racks and Cabinets	C4.5	RK
Cable Marker Holder – SLCT	C1.30	SL

Part Number	Part Description	Width		Height		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm		
C061X030FJC	White, adhesive polyolefin label, 500/cassette, MINI-COM® 1-port identifier. Application codes: BX, FP, and PP.	.61	15.49	.30	7.62	1	10
C125X030FJC	White, adhesive polyolefin label, 200/cassette, MINI-COM® 2-port identifier. Application codes: BX, FP, and PP.	1.25	31.75	.30	7.62	1	10
C138X019FJC	White, adhesive polyolefin label, 200/cassette, MINI-COM® module identifier. Application code: JM.	1.38	35.05	.19	4.83	1	10
C188X030FJC	White, adhesive polyolefin label, 150/cassette, MINI-COM® 3-port identifier. Application code: FP.	1.88	47.75	.30	7.62	1	10
C195X040Y1C	White, non-adhesive polyester label, 100/cassette, single-gang faceplate. Application code: FP.	1.95	49.53	.40	10.16	1	10
C200X100FJC	White, adhesive polyolefin label, 150/cassette, SLCT bundle marker identifier. Application code: SL.	2.00	50.80	1.00	25.40	1	10
C252X030FJC	White, adhesive polyolefin label, 125/cassette, MINI-COM® 4-port identifier. Application codes: BX, FP, and PP.	2.52	64.01	.30	7.62	1	10

Order number of cassettes required.

Table continues on page F1.4

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P1™ Network Component Label Cassettes for *PANTHER*™ LS8E Hand-Held Thermal Transfer Printer (continued)

Part Number	Part Description	Width		Height		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm		
C261X030FJC	White, adhesive polyolefin label, 125/cassette, *MINI-COM*® 4-port identifier. Application codes: FP and PP.	2.61	66.29	.30	7.62	1	10
C261X035Y1C	White, non-adhesive polyester label, 75/cassette, *MINI-COM*® 4-port identifier. Application codes: FP and PP.	2.61	66.29	.35	8.89	1	10
C282X030Y1C	White, non-adhesive polyester label, 75/cassette, *MINI-COM*® 4-port identifier. Application codes: FP and PP.	2.82	71.63	.30	7.62	1	10
C288X040Y1C	White, non-adhesive polyester label, 150/cassette, double-gang faceplate. Application code: FP.	2.88	73.15	.40	10.16	1	10
C315X030FJC	White, adhesive polyolefin label, 100/cassette, *MINI-COM*® 5-port identifier. Application code: FP.	3.15	80.01	.30	7.62	1	10
C379X030FJC	White, adhesive polyolefin label, 75/cassette, *MINI-COM*® 6-port identifier. Application code: FP.	3.79	96.27	.30	7.62	1	10
C390X030Y1C	White, non-adhesive polyester label, 50/cassette, *MINI-COM*® 6-port identifier. Application code: PP.	3.90	99.06	.30	7.62	1	10
C750X050Y1C	White, non-adhesive polyester label, 30/cassette, 110 block identifier. Application code: PB.	7.50	190.50	.50	12.70	1	10
C788X050Y1C	White, non-adhesive polyester label, 30/cassette, *GP6*™ System Identifier. Application code: GP.	7.88	200.15	.50	12.70	1	10

Order number of cassettes required.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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P1™ Self-Laminating Label Cassettes for *PANTHER*™ LS8E Hand-Held Thermal Transfer Printer



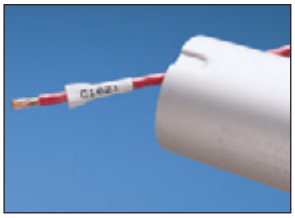
- *P1*™ Label Cassette contains an integrated memory device for automatic formatting, recall of last legend used, and number of labels remaining in the cassette
- Fast loading label cassette includes both label material and ribbon to make changing labels easy
- Self-laminating adhesive labels for wire/cable identification include a colored print-on area and clear overlaminate

Part Number	Part Description	Width		Length		Print-On Height		Min. Cable O.D.		Max. Cable O.D.		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm	In.	mm	In.	mm		
S050X075VAC	White print-on area, vinyl label for 18 – 14 AWG wires, 450/cassette.	.50	12.70	.75	19.05	.25	6.35	.08	2.02	.16	4.04	1	10
S050X125VAC	White print-on area, vinyl label for 12 – 10 AWG wires, 225/cassette.	.50	12.70	1.25	31.75	.38	9.65	.12	3.07	.28	7.03	1	10
S050X150VAC	White print-on area, vinyl label for Category 5e/Category 6 cables, 200/cassette.	.50	12.70	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	1	10
S075X075VAC	White print-on area, vinyl label for 18 – 14 AWG wires, 350/cassette.	.75	19.05	.75	19.05	.25	6.35	.08	2.02	.16	4.04	1	10
S075X100VAC	White print-on area, vinyl label for 12 – 10 AWG wires, 275/cassette.	.75	19.05	1.00	25.40	.38	9.65	.12	3.05	.20	5.08	1	10
S075X125VAC	White print-on area, vinyl label for 12 – 10 AWG wires, 225/cassette.	.75	19.05	1.25	31.75	.38	9.65	.12	3.07	.28	7.03	1	10
S075X150VAC	White print-on area, vinyl label for Category 5e/Category 6 cables, 200/cassette.	.75	19.05	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	1	10
S100X075VAC	White print-on area, vinyl label for 18 – 14 AWG wires, 350/cassette.	1.00	25.40	.75	19.05	.25	6.35	.08	2.02	.16	4.04	1	10
S100X125VAC	White print-on area, vinyl label for 12 – 10 AWG wires, 225/cassette.	1.00	25.40	1.25	31.75	.38	9.65	.12	3.07	.28	7.03	1	10
S100X150VAC*	White print-on area, vinyl label for Category 5e/Category 6 cables, 200/cassette.	1.00	25.40	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	1	10
S100X160VAC	White print-on area, vinyl label 175/cassette. For use with *LABELCORE*™ Sleeves NWSLC-2Y and NWSLC-3Y.	1.00	25.40	1.60	40.64	.80	20.32	.25	6.35	.25	6.35	1	10
S100X220VAC	White print-on area, vinyl label, 125/cassette. For use with *LABELCORE*™ Sleeve NWSLC-7Y.	1.00	25.40	2.20	55.88	1.10	27.94	.48	12.19	.48	12.19	1	10
S100X225VAC*	White print-on area, vinyl label for 8 – 4 AWG wires, 125/cassette.	1.00	25.40	2.25	57.15	.75	19.05	.24	6.06	.48	12.19	1	10
S100X400VAC	White print-on area, vinyl label for 2 – 1 AWG wires, 75/cassette.	1.00	25.40	4.00	101.60	1.00	25.40	.32	8.09	.95	24.26	1	10
S100X650VAC	White print-on area, vinyl label for 1/0-250 MCM wires, 50/cassette.	1.00	25.40	6.50	165.10	1.50	38.10	.48	12.19	1.59	40.39	1	10

*Other colors available, replace A with B (Blue), D (Green), H (Red) and I (Yellow).
Order number of cassettes required.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

NEW! *P1*™ Military Grade Die-Cut Heat Shrink Label Cassettes for *PANTHER*™ LS8E Hand-Held Thermal Transfer Printer



- *P1*™ Label Cassette contains an integrated memory device for automatic formatting, recall of last legend used, and number of labels remaining in the cassette
- Fast loading label cassette includes both label material and ribbon to make changing labels easy
- Meets print performance requirements of MIL-M-81531 and MIL-STD-202F Method 215A, Solution A, C, and D
- Meets UL Standard 224 for flammability
- Shrink ratio 3:1
- Each cassette contains roll of die-cut non-adhesive flattened polyolefin

Part Number	Part Description	Width		Length		Min. Cable Diameter		Max. Cable Diameter		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm	In.	mm		
H100X025H1C	White, 1/8" diameter heat shrinkable polyolefin, 22 – 16 AWG, 100/cassette.	.25	6.35	1.00	25.40	.04	1.02	.13	3.30	1	10
H100X025H2C	Yellow, 1/8" diameter heat shrinkable polyolefin, 22 – 16 AWG, 100/cassette.	.25	6.35	1.00	25.40	.04	1.02	.13	3.30	1	10
H100X034H1C	White, 3/16" diameter heat shrinkable polyolefin, 18 – 12 AWG, 100/cassette.	.34	8.64	1.00	25.40	.06	1.52	.19	4.83	1	10
H100X034H2C	Yellow, 3/16" diameter heat shrinkable polyolefin, 18 – 12 AWG, 100/cassette.	.34	8.64	1.00	25.40	.06	1.52	.19	4.83	1	10
H100X044H1C	White, 1/4" diameter heat shrinkable polyolefin, 16 – 10 AWG, 100/cassette.	.44	11.18	1.00	25.40	.08	2.03	.25	6.35	1	10
H100X044H2C	Yellow, 1/4" diameter heat shrinkable polyolefin, 16 – 10 AWG, 100/cassette.	.44	11.18	1.00	25.40	.08	2.03	.25	6.35	1	10
H100X084H1C	White, 1/2" diameter heat shrinkable polyolefin, 8 – 1 AWG, 75/cassette.	.84	21.34	1.00	25.40	.17	4.32	.50	12.70	1	10
H100X084H2C	Yellow, 1/2" diameter heat shrinkable polyolefin, 8 – 1 AWG, 75/cassette.	.84	21.34	1.00	25.40	.17	4.32	.50	12.70	1	10

Order number of cassettes required.

P1™ Military Grade Continuous Heat Shrink Label Cassettes for *PANTHER*™ LS8E or *COUGAR*™ LS9 Hand-Held Thermal Transfer Printers



- *P1*™ Label Cassette contains an integrated memory device for automatic formatting, recall of last legend used, and number of labels remaining in the cassette
- Fast loading label cassette includes both label material and ribbon to make changing labels easy
- Meets print performance requirements of MIL-M-81531 and MIL-STD-202F Method 215A, Solution A, C, and D
- Meets UL Standard 224 for flammability
- Shrink ratio 3:1
- Each cassette contains a continuous roll of non-adhesive flattened polyolefin that can be cut-to-length

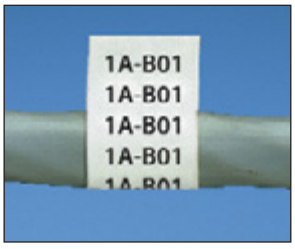
Part Number	Part Description	Width		Length		Min. Cable Diameter		Max. Cable Diameter		Std. Pkg. Qty.	Std. Ctn. Qty.
		in.	mm	Ft.	m	In.	mm	In.	mm		
H000X025H1C	White, 1/8" diameter heat shrinkable polyolefin, 22 – 16 AWG.	.25	6.35	8.0	2.44	.04	1.02	.13	3.30	1	10
H000X025H2C	Yellow, 1/8" diameter heat shrinkable polyolefin, 22 – 16 AWG.	.25	6.35	8.0	2.44	.04	1.02	.13	3.30	1	10
H000X034H1C	White, 3/16" diameter heat shrinkable polyolefin, 18 – 12 AWG.	.34	8.64	8.0	2.44	.06	1.52	.19	4.83	1	10
H000X034H2C	Yellow, 3/16" diameter heat shrinkable polyolefin, 18 – 12 AWG.	.34	8.64	8.0	2.44	.06	1.52	.19	4.83	1	10
H000X044H1C	White, 1/4" diameter heat shrinkable polyolefin, 16 – 10 AWG.	.44	11.18	6.0	1.83	.08	2.03	.25	6.35	1	10
H000X044H2C	Yellow, 1/4" diameter heat shrinkable polyolefin, 16 – 10 AWG.	.44	11.18	6.0	1.83	.08	2.03	.25	6.35	1	10
H000X084H1C	White, 1/2" diameter heat shrinkable polyolefin, 8 – 1 AWG.	.84	21.34	6.0	1.83	.17	4.32	.50	12.70	1	10
H000X084H2C	Yellow, 1/2" diameter heat shrinkable polyolefin, 8 – 1 AWG.	.84	21.34	6.0	1.83	.17	4.32	.50	12.70	1	10

Order number of cassettes required.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

P1™ Vinyl Cloth Continuous Tape Cassettes for *PANTHER*™ LS8E and *COUGAR*™ LS9 Hand-Held Thermal Transfer Printers

- *P1*™ Label Cassette contains an integrated memory device for automatic formatting, recall of last legend used, and number of labels remaining in the cassette
- Fast loading label cassette includes both label material and ribbon to make changing labels easy
- Non-laminated adhesive labels for wire/cable identification

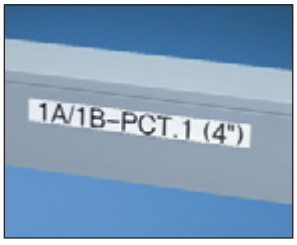


Part Number	Part Description	Height		Length		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	Ft.	m		
T050X000CBC-BK	White, vinyl cloth tape.	.50	12.70	12.5	3.8	1	10
T100X000CBC-BK	White, vinyl cloth tape.	1.00	25.40	12.5	3.8	1	10

Order number of cassettes required.

P1™ Continuous Tape Cassettes for *PANTHER*™ LS8E and *COUGAR*™ LS9 Hand-Held Thermal Transfer Printers

- *P1*™ Label Cassette contains an integrated memory device for automatic formatting, recall of last legend used, and number of labels remaining in the cassette
- Fast loading label cassette includes both label material and ribbon to make changing labels easy
- Labels for general network identification
- Available in a variety of colors, widths, and adhesive materials including continuous polyolefin, polyester, and vinyl
- For flat label applications only



Part Number	Part Description	Height		Length		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	Ft.	m		
T019X000FJC-BK	Black on white, polyolefin *MINI-COM*® Module label tape.	.19	4.83	25.0	7.6	1	10
T024X000FJC-BK	Black on white, polyolefin tape.	.24	6.10	25.0	7.6	1	10
T031X000FJC-BK	Black on white, polyolefin tape.	.31	7.87	25.0	7.6	1	10
T038X000FJC-BK	Black on white, polyolefin tape.	.38	9.65	25.0	7.6	1	10
T038X000VPC-BK	Black on white, vinyl tape.	.38	9.65	25.0	7.6	1	10
T038X000VYC-WH	White on black, vinyl tape.	.38	9.65	25.0	7.6	1	10
T038X000YKC-BK	Black on clear, polyester tape.	.38	9.65	25.0	7.6	1	10
T050X000VPC-BK	Black on white, vinyl tape.	.50	12.70	25.0	7.6	1	10
T050X000VQC-BK*	Black on blue, vinyl tape.	.50	12.70	25.0	7.6	1	10
T050X000VSC-BK*	Black on green, vinyl tape.	.50	12.70	25.0	7.6	1	10
T050X000VUC-BK	Black on orange, vinyl tape.	.50	12.70	25.0	7.6	1	10
T050X000VWC-BK*	Black on red, vinyl tape.	.50	12.70	25.0	7.6	1	10
T050X000VXC-BK	Black on yellow, vinyl tape.	.50	12.70	25.0	7.6	1	10
T050X000VYC-WH	White on black, vinyl tape.	.50	12.70	25.0	7.6	1	10
T050X000YKC-BK*	Black on clear, polyester tape.	.50	12.70	25.0	7.6	1	10
T075X000VPC-BK	Black on white, vinyl tape.	.75	19.05	25.0	7.6	1	10
T075X000YKC-BK	Black on clear, polyester tape.	.75	19.05	25.0	7.6	1	10
T100X000VPC-BK	Black on white, vinyl tape.	1.00	25.40	25.0	7.6	1	10
T100X000VQC-BK*	Black on blue, vinyl tape.	1.00	25.40	25.0	7.6	1	10
T100X000VSC-BK*	Black on green, vinyl tape.	1.00	25.40	25.0	7.6	1	10
T100X000VUC-BK*	Black on orange, vinyl tape.	1.00	25.40	25.0	7.6	1	10
T100X000VWC-BK*	Black on red, vinyl tape.	1.00	25.40	25.0	7.6	1	10
T100X000VXC-BK*	Black on yellow, vinyl tape.	1.00	25.40	25.0	7.6	1	10
T100X000VYC-WH	White on black, vinyl tape.	1.00	25.40	25.0	7.6	1	10
T100X000YKC-BK*	Black on clear, polyester tape.	1.00	25.40	25.0	7.6	1	10

*Available with white ribbon, replace BK suffix with WH.
Order number of cassettes required.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

ULTIMATE ID® Label Cassette for use with *PANTHER*™ LS8E or *COUGAR*™ LS9 Hand-Held Thermal Transfer Printers

- *P1*™ Label Cassette contains an integrated memory device for automatic formatting, recall of last legend used, and number of labels remaining in the cassette
- Fast loading label cassette includes both label material and ribbon to make changing labels easy
- Label cassettes designed for use with *ULTIMATE ID*® Faceplates, Patch Panels, Marker Ties, Modular Furniture Faceplates and Surface Mount Boxes
- Labels assist in the compliance of TIA/EIA-606-A labeling standard
- Available in non-adhesive polyester material



Part Number	Part Description	Height		Length		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	Ft.	m		
UILS8BW	White, non-adhesive polyester label cassette.	.236	6.0	25.0	7.6	1	10

Order number of cassettes required.

TDP43MY Thermal Transfer Desktop Printer and Accessories

- Compact, lightweight design enables use in office or remote locations
- 300 dpi thermal transfer printer creates crisp, clear legends with superior legibility
- Up to 2.00" per second print speed for fast label production
- Use to print a wide variety of self-laminating labels, component labels, and marker plates up to 4.00" wide
- *EASY-MARK*™ Labeling Software and hybrid ribbon included with printer
- Compatible with most standard PCs



TDP43MY

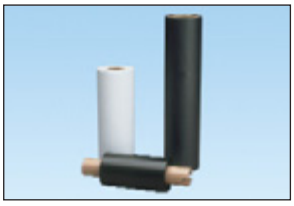


TDP43M-CASE

Part Number	Part Description	Std. Pkg. Qty.
TDP43MY	300 dpi printer; includes printer, *PANDUIT*® *EASY-MARK*™ Labeling Software, RMH4BL hybrid black ribbon, AC power adapter with US and Europlug power cords, manual and quick start card.	1
TDP43M-RS	External label roll stand – used to rear feed labels that are supplied on 3.00" cores, such as photoluminescent tape.	1
TDP43M-CASE	Hardside carrying case. Accommodates printer, AC power adapter, ribbons, printer cable, labels and tools.	1
TDP43M-AC	Replacement AC power adapter with power cord (US cord only).	1
PTR-CLN	Printer cleaning kit – contains bottle of cleaning solution with MSDS, cleaning pen, swabs, alcohol wipes and cleaning instructions.	1

Labels for the TDP43MY can be found on pages F1.9 – F1.10, C1.30.

Ribbons for Use with the TDP43MY Thermal Transfer Desktop Printer



- **Hybrid** – Recommended for use with self-laminating and non-adhesive component labels
- **Resin** – Recommended for use with adhesive component labels
- TDP43MY ribbons are also compatible with *PANDUIT* PTR2/PTR2E thermal transfer desktop printers

Part Number	Part Description	Height		Length		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	Ft.	m		
RMH4BL	Black, hybrid thermal transfer ribbon. For use with self-laminating and component labels.	4.33	110.00	240.00	73.0	1	12
RMR4BL	Black, resin thermal transfer ribbon. For use with component labels and marker plates.	4.33	110.00	240.00	73.0	1	12

Order number of ribbons required.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

Component Labels for TDP43MY Thermal Transfer Desktop Printer Supplied on Rolls



- Use for identifying patch panels, faceplates, punchdown blocks and other network systems hardware
- Die-cut labels designed to provide maximum aesthetic quality and appearance
- Available in adhesive polyester and non-adhesive polyester materials
- Use with *PANDUIT* RMR4BL resin thermal transfer ribbon

Application Description	Typical Application Page	Code
Boxes – Surface Mount, Outlet, Hybrid	B3.24	BX
Faceplates	B3.3	FP
GP6™ Category 6 Punchdown Blocks	C1.33	GP
Jack Modules	B2.2	JM

Application Description	Typical Application Page	Code
Punchdown Blocks – 110	C1.38	PB
Patch Panels	C1.7	PP
Racks and Cabinets	C4.5	RK
Cable Marker Holder – SLCT	C1.30	SL

Part Number	Part Description	Width		Height		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm		
C061X030YPT	White, adhesive polyester label, *Mini-Com*® 1-port identifier. Application codes: BX, FP, and PP.	.61	15.49	.30	7.62	2500	10000
C125X030YPT	White, adhesive polyester label, *Mini-Com*® 2-port identifier. Application codes: BX, FP, and PP.	1.25	31.75	.30	7.62	2500	10000
C138X019Y0T	Black, adhesive polyester label, *Mini-Com*® module identifier. Application code: JM.	1.38	35.05	.19	4.83	2500	10000
C138X019YPT	White, adhesive polyester label, *Mini-Com*® module identifier. Application code: JM.	1.38	35.05	.19	4.83	2500	10000
C188X030YPT	White, adhesive polyester label, *Mini-Com*® 3-port identifier. Application code: FP.	1.88	35.05	.19	4.83	2500	10000
C195X040Y1T	White, non-adhesive polyester label, single gang faceplate identifier. Application code: FP.	1.88	35.05	.19	4.83	2500	10000
C200X100Y0T	Black, adhesive polyester label, SLCT bundle marker identifier. Application code: SL.	2.00	50.80	1.00	25.40	2500	10000
C200X100YPT	White, adhesive polyester label, SLCT bundle marker identifier. Application code: SL.	2.00	50.80	1.00	25.40	2500	10000
C252X030YPT	White, adhesive polyester label, *Mini-Com*® 4-port identifier. Application codes: BX, FP, and PP.	2.52	64.01	.30	7.62	2500	10000
C252X030Y0T-P*	Black, adhesive polyester label, *Mini-Com*® perforated port identifier. Application codes: BX, FP, and PP.	2.52	64.01	.30	7.62	2500	10000
C252X030Y8T-P*	Yellow, adhesive polyester label, *Mini-Com*® perforated port identifier. Application codes: BX, FP, and PP.	2.52	64.01	.30	7.62	2500	10000
C252X030Y9T-P*	Gold, adhesive polyester label, *Mini-Com*® perforated port identifier. Application codes: BX, FP, and PP.	2.52	64.01	.30	7.62	2500	10000
C252X030YPT-P*	White, adhesive polyester label, *Mini-Com*® perforated port identifier. Application codes: BX, FP, and PP.	2.52	64.01	.30	7.62	2500	10000
C252X030YQT-P*	Blue, adhesive polyester label, *Mini-Com*® perforated port identifier. Application codes: BX, FP, and PP.	2.52	64.01	.30	7.62	2500	10000
C252X030YRT-P*	Brown, adhesive polyester label, *Mini-Com*® perforated port identifier. Application codes: BX, FP, and PP.	2.52	64.01	.30	7.62	2500	10000
C252X030YST-P*	Green, adhesive polyester label, *Mini-Com*® perforated port identifier. Application codes: BX, FP, and PP.	2.52	64.01	.30	7.62	2500	10000
C252X030YTT-P*	Gray, adhesive polyester label, *Mini-Com*® perforated port identifier. Application codes: BX, FP, and PP.	2.52	64.01	.30	7.62	2500	10000

*Label is perforated to be used in 1, 2, 3 or 4-position applications.
‡Label is perforated to be used in 1, 2, 3, 4, 5 or 6-position applications.
Order number of labels required in multiples of Std. Pkg. Qty.
Labels roll mounted on 3.00" cores; when using the TDP43MY printer and 3.00" cores, the roll stand (TDP43M-RS) is required.

Table continues on page F1.10

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

Component Labels for TDP43MY Thermal Transfer Desktop Printer Supplied on Rolls (continued)

Part Number	Part Description	Width		Height		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm		
C261X030YUT-P*	Orange, adhesive polyester label, *MINI-COM®* perforated port identifier. Application codes: BX, FP, and PP.	2.52	64.01	.30	7.62	2500	10000
C261X030YVT-P*	Purple, adhesive polyester label, *MINI-COM®* perforated port identifier. Application codes: BX, FP, and PP.	2.52	64.01	.30	7.62	2500	10000
C261X030YWT-P*	Red, adhesive polyester label, *MINI-COM®* perforated port identifier. Application codes: BX, FP, and PP.	2.52	64.01	.30	7.62	2500	10000
C261X030YPT	White, adhesive polyester label, *MINI-COM®* 4-port identifier. Application codes: FP and PP.	2.61	66.29	.30	7.62	2500	10000
C261X035Y1T	White, non-adhesive polyester label, *MINI-COM®* 4-port identifier. Application codes: FP and PP.	2.61	66.29	.30	8.89	2500	10000
C275X125Y0T	Black, adhesive polyester label, general identifier. Application code: RK.	2.75	69.85	1.25	31.75	2500	10000
C275X125YPT	White adhesive, polyester label, general identifier. Application code: RK.	2.75	69.85	1.25	31.75	2500	10000
C288X040Y1T	White, non-adhesive polyester label, double gang faceplate identifier. Application code: FP.	2.88	73.15	.30	10.16	2500	10000
C315X030YPT	White, adhesive polyester label, *MINI-COM®* 5-port identifier. Application code: FP.	3.15	80.01	.30	7.62	2500	10000
C379X030YPT	White, adhesive polyester label, *MINI-COM®* 6-port identifier. Application code: FP.	3.79	96.27	.30	7.62	2500	10000
C379X030Y0T-P‡	Black, adhesive polyester label, *MINI-COM®* perforated port identifier. Application codes: BX, FP, and PP.	3.79	96.27	.30	7.62	2500	10000
C379X030Y8T-P‡	Yellow, adhesive polyester label, *MINI-COM®* perforated port identifier. Application codes: BX, FP, and PP.	3.79	96.27	.30	7.62	2500	10000
C379X030Y9T-P‡	Gold, adhesive polyester label, *MINI-COM®* perforated port identifier. Application codes: BX, FP, and PP.	3.79	96.27	.30	7.62	2500	10000
C379X030YPT-P‡	White, adhesive polyester label, *MINI-COM®* perforated port identifier. Application codes: BX, FP, and PP.	3.79	96.27	.30	7.62	2500	10000
C379X030YQT-P‡	Blue, adhesive polyester label, *MINI-COM®* perforated port identifier. Application codes: BX, FP, and PP.	3.79	96.27	.30	7.62	2500	10000
C379X030YRT-P‡	Brown, adhesive polyester label, *MINI-COM®* perforated port identifier. Application codes: BX, FP, and PP.	3.79	96.27	.30	7.62	2500	10000
C379X030YST-P‡	Green, adhesive polyester label, *MINI-COM®* perforated port identifier. Application codes: BX, FP, and PP.	3.79	96.27	.30	7.62	2500	10000
C379X030YTT-P‡	Gray, adhesive polyester label, *MINI-COM®* perforated port identifier. Application codes: BX, FP, and PP.	3.79	96.27	.30	7.62	2500	10000
C379X030YUT-P‡	Orange, adhesive polyester label, *MINI-COM®* perforated port identifier. Application codes: BX, FP, and PP.	3.79	96.27	.30	7.62	2500	10000
C379X030YVT-P‡	Purple, adhesive polyester label, *MINI-COM®* perforated port identifier. Application codes: BX, FP, and PP.	3.79	96.27	.30	7.62	2500	10000
C379X030YWT-P‡	Red, adhesive polyester label, *MINI-COM®* perforated port identifier. Application codes: BX, FP, and PP.	3.79	96.27	.30	7.62	2500	10000
C390X030Y1T	White, non-adhesive polyester label, *MINI-COM®* 6-port identifier. Application code: PP.	3.90	99.06	.30	7.62	2500	10000
C750X050Y1T	White, non-adhesive polyester label, 110 block identifier. Application code: PB.	7.50	190.50	.50	12.70	2500	10000
C788X050Y1T	White, non-adhesive polyester label, *GP6™* System identifier Application code: GP.	7.88	200.15	.50	12.7	2500	10000

*Label is perforated to be used in 1, 2, 3 or 4-position applications.
‡Label is perforated to be used in 1, 2, 3, 4, 5 or 6-position applications.
Order number of labels required in multiples of Std. Pkg. Qty.
Labels roll mounted on 3.00" cores; when using the TDP43MY printer and 3.00" cores, the roll stand (TDP43M-RS) is required.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

Self-Laminating Labels for TDP43MY Thermal Transfer Desktop Printer Supplied on Rolls



- Self-laminating adhesive labels supplied on rolls, include a colored print-on area and clear overlaminate
- Use with *PANDUIT* RMH4BL hybrid thermal transfer ribbon

Part Number	Part Description	Width		Length		Print-On Height		Min. Cable O.D.		Max. Cable O.D.		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm	In.	mm	In.	mm		
S050X075VATY*	White print-on area, vinyl label for 18 – 14 AWG wires.	.50	12.70	.75	19.05	.25	6.35	.12	3.07	.16	4.04	5000	40000
S050X125VATY*	White print-on area, vinyl label for 12 – 10 AWG wires.	.50	12.70	1.25	31.75	.38	9.65	.12	3.07	.28	7.03	5000	10000
S050X150VATY*	White print-on area, vinyl label for Category 5e/Category 6 cables.	.50	12.70	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	5000	40000
S075X075VATY*	White print-on area, vinyl label for 18 – 14 AWG wires.	.75	19.05	.75	19.05	.25	6.35	.12	3.07	.16	4.04	5000	20000
S075X125VATY*	White print-on area, vinyl label for 12 – 10 AWG wires.	.75	19.05	1.25	31.75	.38	9.65	.12	3.07	.28	7.03	5000	20000
S075X150VATY*	White print-on area, vinyl label for Category 5e/Category 6 cables.	.75	19.05	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	5000	20000
S100X075VATY*	White print-on area, vinyl label for 18 – 14 AWG wires.	1.00	25.40	.75	19.05	.25	6.35	.08	2.02	.16	4.04	5000	10000
S100X125VATY*	White print-on area, vinyl label for 12 – 10 AWG wires.	1.00	25.40	1.25	31.75	.38	9.65	.12	3.07	.28	7.03	5000	10000
S100X150VATY*	White print-on area, vinyl label for Category 5e/Category 6 cables.	1.00	25.40	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	5000	20000
S100X150VBTY	Blue print-on area, vinyl label for Category 5e/Category 6 cables.	1.00	25.40	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	5000	20000
S100X150VCTY	Brown print-on area, vinyl label for Category 5e/Category 6 cables.	1.00	25.40	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	5000	20000
S100X150VDTY	Green print-on area, vinyl label for Category 5e/Category 6 cables.	1.00	25.40	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	5000	20000
S100X150VETY	Gray print-on area, vinyl label for Category 5e/Category 6 cables.	1.00	25.40	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	5000	20000
S100X150VFTY	Orange print-on area, vinyl label for Category 5e/Category 6 cables.	1.00	25.40	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	5000	20000
S100X150VGTY	Purple print-on area, vinyl label for Category 5e/Category 6 cables.	1.00	25.40	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	5000	20000
S100X150VHTY	Red print-on area, vinyl label for Category 5e/Category 6 cables.	1.00	25.40	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	5000	20000
S100X150VITY	Yellow print-on area, vinyl label for Category 5e/Category 6 cables.	1.00	25.40	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	5000	20000
S100X150V0TY	Black print-on area, vinyl label for Category 5e/Category 6 cables.	1.00	25.40	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	5000	20000
S100X150V9TY	Gold print-on area, vinyl label for Category 5e/Category 6 cables.	1.00	25.40	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	5000	20000

Order number of labels required in multiples of Std. Pkg. Qty.
Labels are roll mounted on 3.00" cores; when using the TDP43MY printer and 3.00" cores, the roll stand (TDP43M-RS) is required.
*For labels mounted on 1.00" cores replace suffix TY with 1Y.

Table continues on page F1.12

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

Self-Laminating Labels for TDP43MY Thermal Transfer Desktop Printer Supplied on Rolls (continued)

Part Number	Part Description	Width		Length		Print-On Height		Min. Cable O.D.		Max. Cable O.D.		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm	In.	mm	In.	mm		
S100X225VATY*	White print-on area, vinyl label for 8 – 4 AWG wires.	1.00	25.40	2.25	57.15	.75	19.05	.24	6.06	.48	12.13	5000	20000
S100X225VBTY	Blue print-on area, vinyl label for 8 – 4 AWG wires.	1.00	25.40	2.25	57.15	.75	19.05	.24	6.06	.32	12.13	5000	20000
S100X225VCTY	Brown print-on area, vinyl label for 8 – 4 AWG wires.	1.00	25.40	2.25	57.15	.75	19.05	.24	6.06	.32	12.13	5000	20000
S100X225VDTY	Green print-on area, vinyl label for 8 – 4 AWG wires.	1.00	25.40	2.25	57.15	.75	19.05	.24	6.06	.32	12.13	5000	20000
S100X225VETY	Gray print-on area, vinyl label for 8 – 4 AWG wires.	1.00	25.40	2.25	57.15	.75	19.05	.24	6.06	.32	12.13	5000	20000
S100X225VFTY	Orange print-on area, vinyl label for 8 – 4 AWG wires.	1.00	25.40	2.25	57.15	.75	19.05	.24	6.06	.48	12.13	5000	20000
S100X225VGTY	Purple print-on area, vinyl label for 8 – 4 AWG wires.	1.00	25.40	2.25	57.15	.75	19.05	.24	6.06	.32	12.13	5000	20000
S100X225VHTY	Red print-on area, vinyl label for 8 – 4 AWG wires.	1.00	25.40	2.25	57.15	.75	19.05	.24	6.06	.32	12.13	5000	20000
S100X225VITY	Yellow print-on area, vinyl label for 8 – 4 AWG wires.	1.00	25.40	2.25	57.15	.75	19.05	.24	6.06	.32	12.13	5000	20000
S100X225V0TY	Black print-on area, vinyl label for 8 – 4 AWG wires.	1.00	25.40	2.25	57.15	.75	19.05	.24	6.06	.32	12.13	5000	20000
S100X225V9TY	Gold print-on area, vinyl label for 8 – 4 AWG wires.	1.00	25.40	2.25	57.15	.75	19.05	.24	6.06	.48	12.13	5000	20000
S100X400VATY*	White print-on area, vinyl label for 2 – 1 AWG wires.	1.00	25.40	4.00	101.60	1.00	25.40	.32	8.09	.95	24.26	2500	12500
S100X650VATY*	White print-on area, vinyl label for 1/0-250 MCM wires.	1.00	25.40	6.50	165.10	1.50	38.10	.48	12.13	1.59	40.43	1000	2000
S200X225VATY*	White print-on area, vinyl label for 8 – 4 AWG wires.	2.00	50.80	2.25	57.15	.75	19.05	.24	6.06	.48	12.13	1000	4000
S200X400VATY*	White print-on area, vinyl label for 2 – 1 AWG wires.	2.00	50.80	4.00	101.60	1.00	25.40	.32	8.09	.95	24.26	1000	3000
S200X650VATY*	White print-on area, vinyl label for 1/0-250 MCM wires.	2.00	50.80	6.50	165.10	1.50	38.10	.48	12.13	1.59	40.43	1000	2000

Order number of labels required in multiples of Std. Pkg. Qty.
Labels are roll mounted on 3.00" cores; when using the TDP43MY printer and 3.00" cores, the roll stand (TDP43M-RS) is required.
*For labels mounted on 1.00" cores replace suffix TY with 1Y.

Marker Plates for TDP43MY Thermal Transfer Desktop Printer Supplied on Rolls



- Non-adhesive marker plates offer crisp, clear legends with superior legibility
- Attachable in a horizontal or vertical orientation
- Available in a variety of colors and sizes
- Use with *PANDUIT* RMR4BL resin thermal transfer ribbon

Part Number	Part Description	Width		Height		Print-On Area Width		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm		
M300X100Y6T	Yellow, thermal transfer marker plate.	3.00	76.20	1.00	25.40	1.80	45.70	1	4
M300X100Y7T	White, thermal transfer marker plate.	3.00	76.20	1.00	25.40	1.80	45.70	1	4
M300X050Y6T	Yellow, thermal transfer marker plate.	3.00	76.20	.50	12.70	1.80	45.70	1	4
M300X050Y7T	White, thermal transfer marker plate.	3.00	76.20	.50	12.70	1.80	45.70	1	4
M200X100Y6T	Yellow, thermal transfer marker plate.	2.00	50.80	1.00	25.40	.80	20.30	1	4
M200X100Y7T	White, thermal transfer marker plate.	2.00	50.80	1.00	25.40	.80	20.30	1	4
M200X050Y6T	Yellow, thermal transfer marker plate.	2.00	50.80	.50	12.70	1.07	27.30	1	4
M200X050Y7T	White, thermal transfer marker plate.	2.00	50.80	.50	12.70	1.07	27.30	1	4

Order number of marker plates required in multiples of Std. Pkg. Qty.

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EASY-MARK™ Labeling Software

- *EASY-MARK*™ Labeling Software simplifies label creation for the specific needs of your applications
- Instructions and user interface are available in English, French, German, Italian, Spanish, Korean, Chinese and Portuguese
- Intuitive interview process allows automatic generation of labels and signs
- Software selects and formats the optimum label for your specific application
- **WYSIWYG** (What You See Is What You Get) user interface, alpha/numeric serialization, data import, symbol import
- *EASY-MARK*™ Labeling Software is part of a complete line of innovative identification solutions from *PANDUIT*
- Supports most WINDOWS^ fonts drivers for standard thermal transfer, dot matrix, laser and ink jet, including *PANDUIT* thermal transfer printers

System Requirements:

- WINDOWS^ 2000, WINDOWS^ NT4.x, WINDOWS^ XP, or WINDOWS^ Vista; 64 MB hard drive space and 64 MB RAM (256 MB RAM Recommended)



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
PROG-EMCD3	*EASY-MARK*™ Labeling Software, supplied on CD-ROM.	1	10

^WINDOWS is a registered trademark of Microsoft Corporation in the United States and/or other countries.

CAD-CONNECT™ Labeling Software

- Generates labels quickly and easily directly from electronic CAD files
- Eliminates steps and time spent manually copying CAD identifiers into labeling software
- Program combines the power of an innovative wizard interview and *EASY-MARK*™ Labeling Software to capture and organize identifiers from electronic CAD files to automatically create and print labels
- Compatible with AutoCAD* 2000i and Visio^ 2002 or newer versions of CAD
- Exports to alternative formats such as EXCEL^ (XLS) or Text (CSV) files for future use and documentation

System Requirements:

- WINDOWS^ 2000, WINDOWS^ NT4.x, WINDOWS^ XP, or WINDOWS^ Vista; 64MB hard drive space and 64MB RAM (256MB RAM Recommended)



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
PROG-CCCD	*CAD-CONNECT*™ Labeling Software, including *EASY-MARK*™ Labeling Software, supplied on CD-ROM.	1	10

*AutoCAD is a registered trademark of Autodesk, Inc.
^Visio, WINDOWS, and EXCEL are all registered trademarks of Microsoft Corporation in the United States and/or other countries.

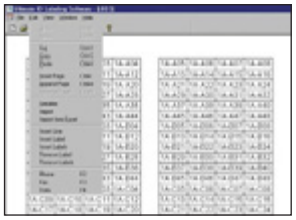
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ULTIMATE ID® Network System Labeling Software

- Fast and easy creation of labels for *ULTIMATE ID*® Network Labeling System patch panels, faceplates, surface mount boxes and marker ties
- Create alpha and numeric serializations
- ODBC (Open Data-Base Connectivity) allows importing of information from electronic databases such as EXCEL^ and ACCESS^ directly onto the label formats
- *ULTIMATE ID*® System formats are preloaded and ready to use
- On-line help function files, including the TIA/EIA-606-A Labeling Compliance Brochure that assists in understanding the TIA/EIA-606-A standard
- Easy to install and supplied on CD-ROM
- Image library that includes commonly used symbols for fax, data, and voice
- Automatically aligns legends with ports on patch panels and faceplates
- Vertical line function enables users to separate legends
- Automatic font sizing
- Supports most WINDOWS^ printer drivers and is compatible with standard desktop laser and ink jet printers
- *ULTIMATE ID*® Software is part of a complete system for identification designed to efficiently support TIA/EIA-606-A standard labeling requirements; reference pages A1.6 – A1.9 for a complete system overview

System Requirements:

- WINDOWS^ 95, WINDOWS^ 98, WINDOWS^ Me, WINDOWS^ 2000, WINDOWS^ NT 4.x, and WINDOWS^ XP; minimum 486 processor; minimum 10 MB of RAM; 30 MB hard drive space



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
UISW	*ULTIMATE ID*® Labeling Software, supplied on CD-ROM.	1	10

^WINDOWS, EXCEL, and ACCESS are al registered trademarks of Microsoft Corporation in the United States and other countries.

ULTIMATE ID® Laser/Ink Jet Network System Labels



- Labels can be printed in both laser and ink jet printers
- Designed to efficiently support TIA/EIA-606-A standard labeling requirements
- Laser and ink jet labels for use with *ULTIMATE ID*™ Faceplates, Patch Panels, Marker Ties, Modular Furniture Faceplate and Surface Mount Boxes
- Durable multi-layer construction
- Non-adhesive labels are easily removed from 8.5" x 11" label sheets
- Unique non-adhesive material configuration
- Ultimate ID™ Labels are part of a complete system for identification designed to efficiently support TIA/EIA-606-A standard labeling requirements; reference pages A1.6 – A1.9 for a complete system overview

Part Number‡	Part Description	Width		Height		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm		
UILJ1	White, non-adhesive polyester labels, 264 per sheet, 1-port labels.	.680	17.27	.236	6.00	5	50
UILJ2	White, non-adhesive polyester labels, 132 per sheet, 2-port labels.	1.315	33.40	.236	6.00	5	50
UILJ3	White, non-adhesive polyester labels, 99 per sheet, 3-port labels.	1.950	49.53	.236	6.00	5	50
UILJ4	White, non-adhesive polyester labels, 66 per sheet, 4-port labels.	2.585	65.66	.236	6.00	5	50
UILJ6	White, non-adhesive polyester labels, 66 per sheet, 6-port labels.	3.855	97.92	.236	6.00	5	50
UILJCOMBO	White, non-adhesive polyester labels, combination sheet with forty 1-port, sixty 2-port, three 3-port and twenty-four 4-port labels.	—	—	.236	6.00	5	50

*Order number of sheets required in multiples of Std. Pkg. Qty.
‡Add EI to end of part number for Electrical Ivory labels.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

Component Labels for Laser/Ink Jet Desktop Printers Supplied on 8.5" x 11" Sheets



- Labels can be printed in both laser and ink jet printers
- Use for identifying patch panels, faceplates, punchdown blocks and other network systems hardware
- Die-cut labels designed to provide maximum aesthetic quality and appearance
- Available in adhesive polyolefin and non-adhesive polyester materials

Application Description	Typical Application Page	Code
Boxes – Surface Mount, Outlet, Hybrid	B3.24	BX
Faceplates	B3.3	FP
GP6™ Category 6 Punchdown Blocks	C1.33	GP
Jack Modules	B2.2	JM

Application Description	Typical Application Page	Code
Punchdown Blocks – 110	C1.38	PB
Patch Panels	C1.7	PP
Racks and Cabinets	C4.5	RK
Cable Marker Holder – SLCT	C1.30	SL

Part Number	Part Description	Width		Height		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm		
C061X030FJJ	White, adhesive polyolefin label, *Mini-Com®* 1-port identifier. Application codes: BX, FP, and PP.	.61	15.49	.30	7.62	5000	25000
C125X030FJJ	White, adhesive polyolefin label, *Mini-Com®* 2-port identifier. Application codes: BX, FP, and PP.	1.25	31.75	.30	7.62	2500	12500
C138X019FJJ	White, adhesive polyolefin label, *Mini-Com®* module identifier. Application code: JM.	1.38	35.05	.19	4.83	2500	12500
C188X030FJJ	White, adhesive polyolefin label, *Mini-Com®* 3-port identifier. Application code: FP.	1.88	47.75	.30	7.62	1000	5000
C195X040Y1J	White, non-adhesive polyester label, single-gang faceplate. Application code: FP.	1.95	49.53	.40	10.16	1000	5000
C200X100FJJ	White, adhesive polyolefin label, SLCT bundle marker identifier. Application code: SL.	2.00	50.80	1.00	25.40	1000	5000
C252X030FJJ	White, adhesive polyolefin label, *Mini-Com®* 4-port identifier. Application codes: BX, FP, and PP.	2.52	64.01	.30	7.62	1000	5000
C261X030FJJ	White, adhesive polyolefin label, *Mini-Com®* 4-port identifier. Application codes: FP and PP.	2.61	66.29	.30	7.62	1000	5000
C261X035Y1J	White, non-adhesive polyester label, *Mini-Com®* 4-port identifier. Application codes: FP and PP.	2.61	66.29	.35	8.89	1000	5000
C282X030Y1J	White, non-adhesive polyester label, *Mini-Com®* 4-port identifier. Application codes: FP and PP.	2.82	71.63	.30	7.62	1000	5000
C288X040Y1J	White, non-adhesive polyester label, double-gang faceplate. Application code: FP.	2.88	73.15	.40	10.16	1000	5000
C315X030FJJ	White, adhesive polyolefin label, *Mini-Com®* 5-port identifier. Application code: FP.	3.15	80.01	.30	7.62	1000	5000
C379X030FJJ	White, adhesive polyolefin label, *Mini-Com®* 6-port identifier. Application code: FP.	3.79	96.27	.30	7.62	1000	5000
C390X030Y1J	White, non-adhesive polyester label, *Mini-Com®* 6-port identifier. Application code: PP.	3.90	99.06	.30	7.62	1000	5000
C750X050Y1J	White, non-adhesive polyester label, 110 block identifier. Application code: PB.	7.50	190.50	.50	12.70	500	2500
C788X050Y1J	White, non-adhesive polyester label, *GP6™* System identifier. Application code: GP.	7.88	200.15	.50	12.70	500	2500

Order number of labels required in multiples of Std. Pkg. Qty.

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A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

Self-Laminating Labels for Use with Laser/Ink Jet Desktop Printers Supplied on 8.5" x 11" Sheets



- Labels can be printed in both laser and ink jet printers
- Self-laminating adhesive labels include a colored print-on area and clear overlaminate

Part Number	Part Description	Width		Length		Print-On Area Height		Min. Cable O.D.		Max. Cable O.D.		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm	In.	mm	In.	mm		
S050X075YAJ	White print-on area, polyester label for 18 – 14 AWG wire.	.50	12.70	.75	19.05	.25	6.35	.12	3.03	.16	4.04	5000	25000
S050X125YAJ	White print-on area, polyester label for 12 – 10 AWG wire.	.50	12.70	1.25	31.75	.38	9.65	.12	3.03	.28	7.03	5000	25000
S050X150YAJ	White print-on area, polyester label for Category 5e/ Category 6 cables.	.50	12.70	1.50	38.10	.50	12.70	.16	4.07	.32	8.09	5000	25000
S075X075YAJ	White print-on area, polyester label for 18 – 14 AWG wire.	.75	19.05	.75	19.05	.25	6.35	.08	2.02	.16	4.04	2500	10000
S075X125YAJ	White print-on area, polyester label for 12 – 10 AWG wire.	.75	19.05	1.25	31.75	.38	9.65	.12	3.07	.28	7.03	2500	10000
S075X150YAJ	White print-on area, polyester label for Category 5e/ Category 6 cables.	.75	19.05	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	2500	10000
S100X075YAJ	White print-on area, polyester label for 18 – 14 AWG wire.	1.00	25.40	.75	19.05	.25	6.35	.08	2.02	.16	4.07	2500	10000
S100X125YAJ	White print-on area, polyester label for 12 – 10 AWG wire.	1.00	25.40	1.25	31.75	.38	9.65	.12	3.07	.28	7.03	2500	10000
S100X150YAJ	White print-on area, polyester label for Category 5e/ Category 6 cables.	1.00	25.40	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	2500	10000
S100X150YBJ	Blue print-on area, polyester label for Category 5e/ Category 6 cables.	1.00	25.40	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	2500	10000
S100X150YDJ	Green print-on area, polyester label for Category 5e/ Category 6 cables.	1.00	25.40	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	2500	10000
S100X150YHJ	Red print-on area, polyester label for Category 5e/ Category 6 cables.	1.00	25.40	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	2500	10000
S100X150YIJ	Yellow print-on area, polyester label for Category 5e/ Category 6 cables.	1.00	25.40	1.50	38.10	.50	12.70	.16	4.04	.32	8.09	2500	10000

Order number of labels required in multiples of Std. Pkg. Qty.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Self-Laminating Labels for Use with Laser/Ink Jet Desktop Printers Supplied on 8.5" x 11" Sheets (continued)

Part Number	Part Description	Width		Length		Print-On Area Height		Min. Cable O.D.		Max. Cable O.D.		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm	In.	mm	In.	mm		
S100X160YAJ	White print-on area, polyester label. For use with *LabelCore*™ Sleeves NWSLC-2Y and NWSLC-3Y.	1.00	25.40	1.60	40.64	.80	20.32	.25	6.35	.25	6.35	2500	10000
S100X220YAJ	White print-on area, polyester label. For use with *LabelCore*™ Sleeve NWSLC-7Y.	1.00	25.40	2.20	55.88	1.10	27.94	.35	8.89	.35	8.89	1000	5000
S100X225YAJ	White print-on area, polyester label for 8 – 4 AWG wire.	1.00	25.40	2.25	57.15	.75	19.05	.24	6.06	.48	12.13	1000	5000
S100X225YBJ	Blue print-on area, polyester label for 8 – 4 AWG wire.	1.00	25.40	2.25	57.15	.75	19.05	.24	6.06	.48	12.13	1000	5000
S100X225YDJ	Green print-on area, polyester label for 8 – 4 AWG wire.	1.00	25.40	2.25	57.15	.75	19.05	.24	6.06	.48	12.13	1000	5000
S100X225YHJ	Red print-on area, polyester label for 8 – 4 AWG wire.	1.00	25.40	2.25	57.15	.75	19.05	.24	6.06	.48	12.13	1000	5000
S100X225YIJ	Yellow print-on area, polyester label for 8 – 4 AWG wire.	1.00	25.40	2.25	57.15	.75	19.05	.24	6.06	.48	12.13	1000	5000
S100X400YAJ	White print-on area, polyester label for 2 – 1 AWG wire.	1.00	25.40	4.00	101.60	1.00	25.40	.32	8.09	.95	24.26	1000	5000
S100X650YAJ	White print-on area, polyester label for 1/0-350 MCM wires.	1.00	25.40	6.50	165.10	1.50	38.10	.48	12.13	1.59	40.43	1000	5000
S200X225YAJ	White print-on area, polyester label for 8 – 4 AWG wire.	2.00	50.80	2.25	57.15	.75	19.05	.24	6.06	.48	12.13	1000	5000
S200X400YAJ	White print-on area, polyester label for 2 – 1 AWG wire.	2.00	50.80	4.00	101.60	1.00	25.40	.32	8.09	.95	24.26	1000	5000
S200X650YAJ	White print-on area, polyester label for 1/0-350 MCM wires.	2.00	50.80	6.50	165.10	1.50	38.10	.48	12.13	1.59	40.43	500	2500

Order number of labels required in multiples of Std. Pkg. Qty.

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B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

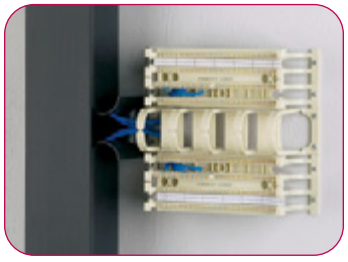
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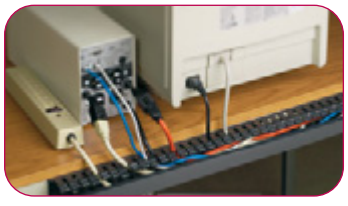
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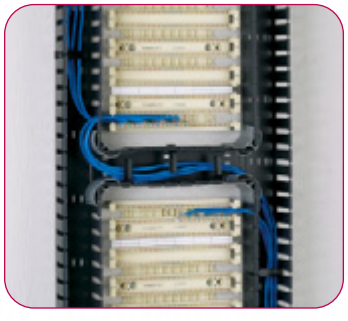
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WIRING DUCT

PANDUIT® PANDUCT® Wiring Duct is designed to manage, protect, and conceal cabling. Available in a wide selection of styles, sizes, colors and materials, PANDUCT® Wiring Duct meets a variety of application and environmental needs. For network cabling, *PANDUIT* provides solutions from backboard applications in the Telecommunications Room to cord management at the workstation. All PANDUCT® Wiring Ducts are UL Recognized and CSA Certified.





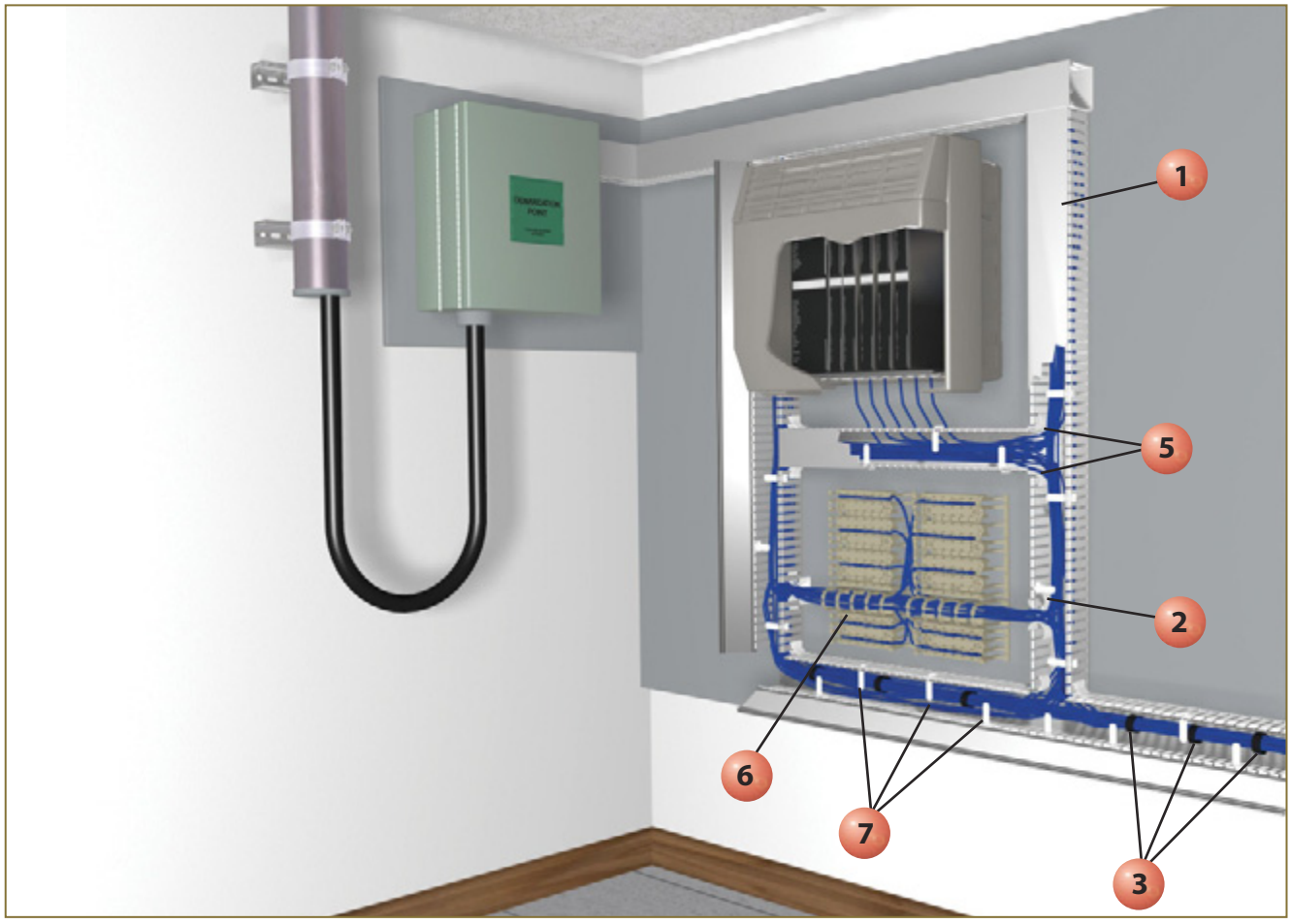


- Type H hinged cover PVC wiring duct and type HS hinged cover solid wall raceway feature a dual-sided hinging cover for convenient channel access and prevents cover loss for superior aesthetics
- Type G wide slot PVC wiring duct is ideal for managing larger diameter cables and is available in the widest range of sizes in black color
- Type F narrow slot PVC wiring duct is designed for smaller cable diameters for high density cable management
- Type FS solid wall PVC raceway completely conceals and protects cabling for longer trunking runs where frequent breakouts are not required
- Type NNC halogen-free metric wiring duct offers a wide finger design for larger diameter cables with the protection and temperature resistance of halogen-free material
- Type FL flexible wiring duct is made of a flexible polypropylene material to handle non-uniform mounting surfaces and reduce installation time

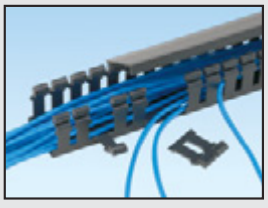
PANDUIT continues to develop new PANDUCT® Wiring Duct solutions to satisfy the challenges facing our customers worldwide.

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Wiring Duct for Backboard Mounted Applications Roadmap



1 *PANDUCT*® Type H Hinged Cover Wiring Duct
(page F2.4)



3 *TAK-TAPE*™ Hook & Loop Strips
(page F3.4)



2 *FIBER-DUCT*™ Bend Radius Control Trumpets
(page F2.13)

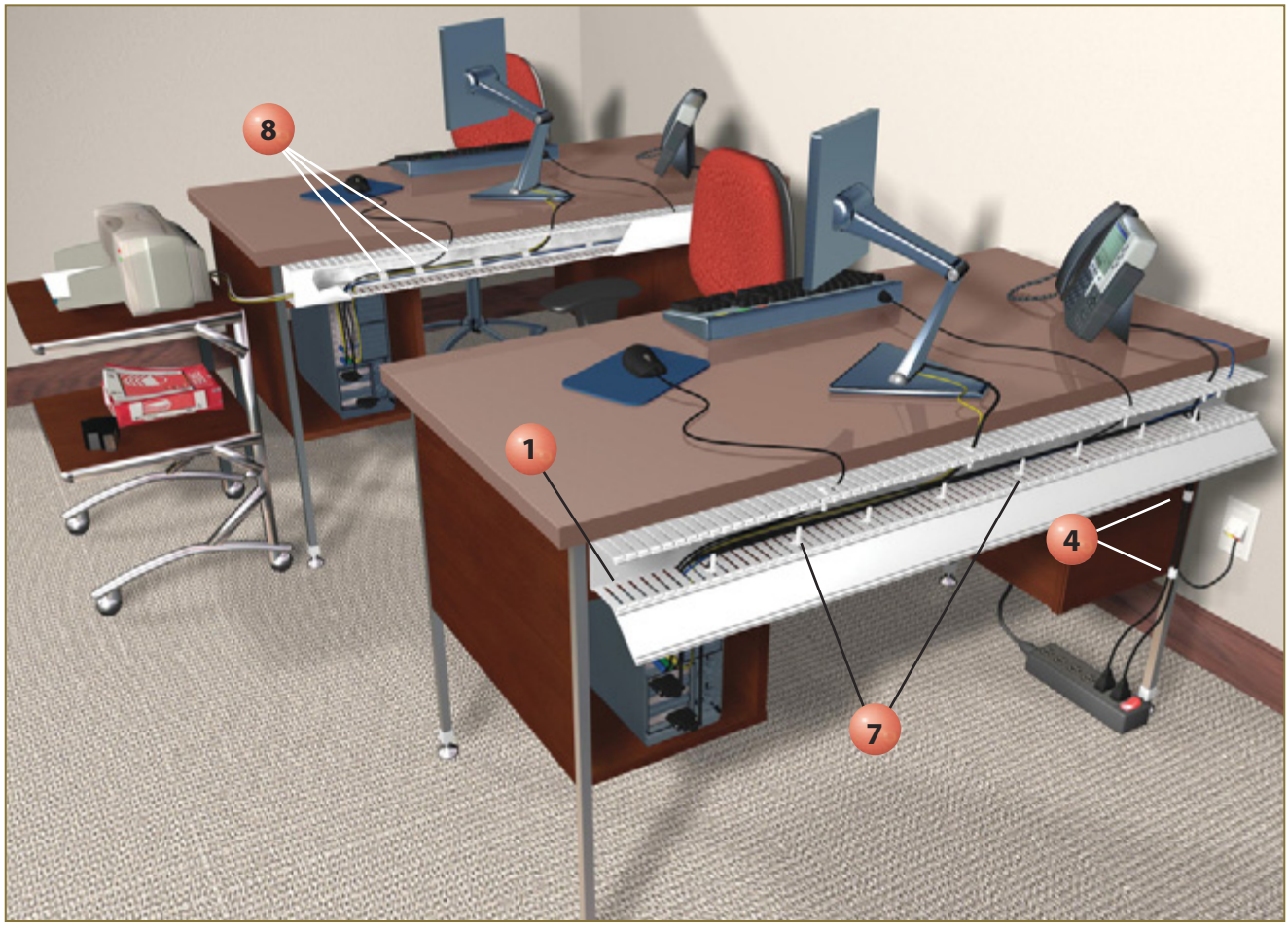


4 *ULTRA-CINCH*™ Hook & Loop Ties
TAK-TY® Hook & Loop Cable Ties
(pages F3.4 and F3.3)



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Wiring Duct for Cord Management at the Workstation Roadmap



5 ***PANDUCT*® Bend Radius Control Strips**
(page F2.13)



7 ***PANDUCT*® Type G and H Wiring Duct Wire Retainers**
(page F2.10)



6 ***GP6™ PLUS* Punchdown System**
(pages C1.40 – C1.48)



8 ***TAK-TY*® Hook & Loop Cable Tie Mounts**
(page F3.26)



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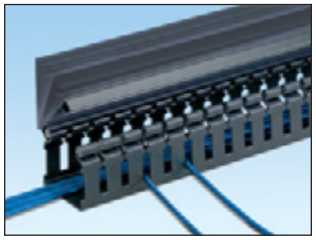
PANDUCT® Type H – Hinged Cover Wiring Duct

Specifications

- Material: Lead-free PVC
- UL Recognized continuous use temperature: 122°F (50°C)
- UL 94 flammability rating of V-0
- Conforms with NFPA 79-2007 section 13.3.1 requirement for flame retardant material
- Provided with mounting holes

Features and Benefits

- Integrated hinged cover design allows easy access to wiring without hassle of removing and reinstalling cover
- Dual-sided hinge can open up to 100° from either sidewall of duct base for easy access to channel
- Cover retention flanges prevent cover from sliding when installed on duct base
- Double scoreline saves installation time and lowers installed cost
- Restricted slot design retains wire in slot for fast, easy wire installation or removal



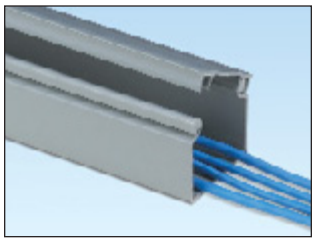
Part Number	Duct Size (W x H)		Cover Part Number	Length Ft.	Std. Pkg. Qty.	Std. Ctn. Qty.
	In.	mm				
H1.5X2BL6	1.75 x 1.98	44.5 x 50.3	**HC1.5BL6**	6	6	120
H1.5X3BL6	1.75 x 3.06	44.5 x 77.7	**HC1.5BL6**	6	6	120
H2X2BL6	2.17 x 3.06	55.1 x 77.7	**HC2BL6**	6	6	120
H2X3BL6	2.17 x 3.06	55.1 x 77.7	**HC2BL6**	6	6	60
H2X4BL6	2.17 x 4.10	55.1 x 104.1	**HC2BL6**	6	6	60
H3X3BL6	3.25 x 3.06	82.6 x 77.7	**HC3BL6**	6	6	60
H3X4BL6	3.25 x 4.10	82.6 x 104.1	**HC3BL6**	6	6	60
H4X4BL6	4.25 x 4.10	108.0 x 104.1	**HC4BL6**	6	6	60

For other colors replace BL (Black) with LG (Light Gray) or WH (White).
Order number of feet required, in multiples of 6' or Standard Carton Quantity.
Base and cover sold separately.
Height dimension includes duct with cover.

PANDUCT® Type HS – Hinged Cover Solid Wall Raceway

Specifications

- Material: Lead-free PVC
- Rated for continuous use temperature: 122°F (50°C)
- UL 94 flammability rating V-0
- Conforms with NFPA 79-2007 section 13.3.1 requirement for flame retardant material
- Available in light gray and white; black available in 2x2 and 4x4 only



Part Number	Duct Size (W x H)		Cover Part Number	Length Ft.	Std. Pkg. Qty.	Std. Ctn. Qty.
	In.	mm				
HS1.5X2LG6NM	1.75 x 1.98	44.5 x 50.3	**HC1.5LG6**	6	6	120
HS1.5X3LG6NM	1.75 x 3.06	44.5 x 77.7	**HC1.5LG6**	6	6	60
HS2X2LG6NM	2.17 x 1.98	55.1 x 50.3	**HC2LG6**	6	6	120
HS2X3LG6NM	2.17 x 3.06	55.1 x 77.7	**HC2LG6**	6	6	60
HS2X4LG6NM	2.17 x 4.10	55.1 x 104.1	**HC2LG6**	6	6	60
HS3X3LG6NM	3.25 x 3.06	82.6 x 77.7	**HC3LG6**	6	6	60
HS3X4LG6NM	3.25 x 4.10	82.6 x 104.1	**HC3LG6**	6	6	60
HS4X4LG6NM	4.25 x 4.10	108.0 x 104.1	**HC4LG6**	6	6	60

Part numbers shown available in LG (Light Gray) and WH (White). 2x2 and 4x4 sizes available in BL (Black) colors.
Base and cover sold separately.
Height dimension includes duct with cover.
Order number of feet required, in multiples of 6' or Standard Carton Quantity.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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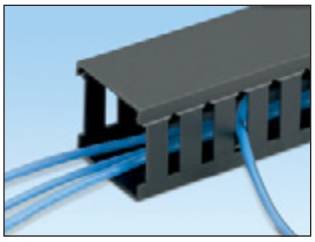
PANDUCT® Type G – Wide Slot Wiring Duct

Specifications

- Material: Lead-free PVC
- UL Recognized continuous use temperature: 122°F (50°C)
- UL 94 flammability rating of V-0
- Conforms with NFPA 79-2007 section 13.3.1 requirement for flame retardant material
- Provided with mounting holes

Features and Benefits

- Wide finger design provides greater rigidity and larger slot width
- *PANDUIT* exclusive rounded edges will not cut hands or abrade wiring insulation
- Non-slip cover will not slide easily when installed on duct base
- Flush cover design holds more wires than traditional duct designs
- Double scoreline saves installation time and lowers installed cost
- Specially formulated lead-free material eliminates health concerns associated with PVC that contains lead
- Restricted slot design retains wire in slot for fast, easy wire installation or removal



Part Number	Duct Size (W x H)		Slot Width		Cover Part Number	Length Ft.	Std. Pkg. Qty.	Std. Ctn. Qty.
	In.	mm	In.	mm				
G.75X2BL6	.93 x 2.03	23.6 x 51.7	.31	7.9	C.75BL6	6	6	120
G1X1BL6	1.26 x 1.12	32.0 x 28.4	.31	7.9	C1BL6	6	6	120
G1X1.5BL6	1.26 x 1.62	32.0 x 41.1	.31	7.9	C1BL6	6	6	120
G1X2BL6	1.26 x 2.12	32.0 x 53.8	.31	7.9	C1BL6	6	6	120
G1X3BL6	1.26 x 3.12	32.0 x 79.2	.31	7.9	C1BL6	6	6	120
G1X4BL6	1.26 x 4.10	32.0 x 104.1	.31	7.9	C1BL6	6	6	60
G1.5X1.5BL6	1.75 x 1.62	44.5 x 41.1	.31	7.9	C1.5BL6	6	6	120
G1.5X2BL6	1.75 x 2.12	44.5 x 53.8	.31	7.9	C1.5BL6	6	6	120
G1.5X3BL6	1.75 x 3.12	44.5 x 79.2	.31	7.9	C1.5BL6	6	6	120
G1.5X4BL6	1.75 x 4.10	44.5 x 104.1	.31	7.9	C1.5BL6	6	6	60
G2X1BL6	2.25 x 1.12	57.2 x 28.4	.31	7.9	C2BL6	6	6	120
G2X2BL6	2.25 x 2.12	57.2 x 53.8	.31	7.9	C2BL6	6	6	120
G2X3BL6	2.25 x 3.12	57.2 x 79.2	.31	7.9	C2BL6	6	6	60
G2X4BL6	2.25 x 4.10	57.2 x 104.1	.31	7.9	C2BL6	6	6	60
G2.5X3BL6	2.75 x 3.12	69.9 x 79.2	.31	7.9	C2.5BL6	6	6	120
G3X2BL6	3.25 x 2.12	82.6 x 53.8	.31	7.9	C3BL6	6	6	120
G3X3BL6	3.25 x 3.12	82.6 x 79.2	.31	7.9	C3BL6	6	6	60
G3X4BL6	3.25 x 4.10	82.6 x 104.1	.31	7.9	C3BL6	6	6	60
G4X2BL6	4.25 x 2.12	108.0 x 53.8	.31	7.9	C4BL6	6	6	60
G4X3BL6	4.25 x 3.12	108.0 x 79.2	.31	7.9	C4BL6	6	6	60
G4X4BL6	4.25 x 4.10	108.0 x 104.1	.31	7.9	C4BL6	6	6	60
G4X5BL6	4.25 x 5.10	108.0 x 129.5	.38	9.7	C4BL6	6	6	60

For other colors replace BL (Black) with LG (Light Gray) or WH (White).
Order number of feet required, in multiples of 6' or Standard Carton Quantity.
Height dimension includes duct with cover.

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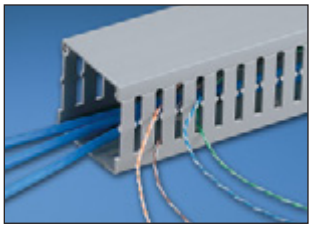
PANDUCT® Type F – Narrow Slot Wiring Duct

Specifications

- Material: Lead-free PVC
- UL Recognized continuous use temperature: 122°F (50°C)
- UL 94 flammability rating of V-0
- Conforms with NFPA 79-2007 section 13.13.1 requirement for flame retardant material
- Provided with mounting holes

Features and Benefits

- Narrow finger design provides closer spacing for use with high density applications
- *PANDUIT* exclusive rounded edges will not cut hands or abrade wiring insulation
- Non-slip cover will not slide easily when installed on duct base
- Flush cover design holds more wires than traditional duct designs
- Double scoreline saves installation time and lowers installed cost
- Specially formulated lead-free material eliminates health concerns associated with PVC that contains lead
- Restricted slot design retains wire in slot for fast, easy wire installation or removal



Part Number	Duct Size (W x H)		Slot Width		Cover Part Number	Length Ft.	Std. Pkg. Qty.	Std. Ctn. Qty.
	In.	mm	In.	mm				
F.5X.5LG6	.69 x .60	17.5 x 15.2	.20	5.0	**C.5LG6**	6	6	120
F.5X1LG6	.69 x 1.06	17.5 x 26.9	.20	5.0	**C.5LG6**	6	6	120
F.75X.75LG6	.93 x .82	23.6 x 20.9	.20	5.0	**C.75LG6**	6	6	120
F.75X1.5LG6	.93 x 1.57	23.6 x 39.9	.20	5.0	**C.75LG6**	6	6	120
F1X1LG6	1.26 x 1.13	32.0 x 28.7	.20	5.0	**C1LG6**	6	6	120
F1X1.5LG6	1.26 x 1.62	32.0 x 41.1	.20	5.0	**C1LG6**	6	6	120
F1X2LG6	1.26 x 2.12	32.0 x 53.8	.20	5.0	**C1LG6**	6	6	120
F1X3LG6	1.26 x 3.12	32.0 x 79.2	.20	5.0	**C1LG6**	6	6	120
F1X4LG6	1.26 x 4.10	32.0 x 104.1	.20	5.0	**C1LG6**	6	6	60
F1.5X1LG6	1.75 x 1.12	44.5 x 28.4	.20	5.0	**C1.5LG6**	6	6	120
F1.5X1.5LG6	1.75 x 1.62	44.5 x 41.1	.20	5.0	**C1.5LG6**	6	6	120
F1.5X2LG6	1.75 x 2.12	44.5 x 53.8	.20	5.0	**C1.5LG6**	6	6	120
F1.5X3LG6	1.75 x 3.12	44.5 x 79.2	.20	5.0	**C1.5LG6**	6	6	120
F1.5X4LG6	1.75 x 4.10	44.5 x 104.1	.20	5.0	**C1.5LG6**	6	6	60
F2X1LG6	2.25 x 1.12	57.2 x 28.4	.20	5.0	**C2LG6**	6	6	120
F2X1.5LG6	2.25 x 1.62	57.2 x 41.1	.20	5.0	**C2LG6**	6	6	120
F2X2LG6	2.25 x 2.12	57.2 x 53.8	.20	5.0	**C2LG6**	6	6	120
F2X3LG6	2.25 x 3.12	57.2 x 79.2	.20	5.0	**C2LG6**	6	6	60
F2X4LG6	2.25 x 4.10	57.2 x 104.1	.20	5.0	**C2LG6**	6	6	60
F2X5LG6	2.25 x 5.10	57.2 x 129.5	.20	5.0	**C2LG6**	6	6	60
NEW! **F2.5X3LG6**	2.75 x 3.12	69.9 x 79.2	.20	5.0	**C2.5LG6**	6	6	120
F3X1LG6	3.25 x 1.12	82.6 x 28.4	.20	5.0	**C3LG6**	6	6	120
F3X2LG6	3.25 x 2.12	82.6 x 53.8	.20	5.0	**C3LG6**	6	6	120
F3X3LG6	3.25 x 3.12	82.6 x 79.2	.20	5.0	**C3LG6**	6	6	60
F3X4LG6	3.25 x 4.10	82.6 x 104.1	.20	5.0	**C3LG6**	6	6	60
F3X5LG6	3.25 x 5.10	82.6 x 129.5	.20	5.0	**C3LG6**	6	6	60
F4X2LG6	4.25 x 2.12	108.0 x 53.8	.20	5.0	**C4LG6**	6	6	60
F4X3LG6	4.25 x 3.12	108.0 x 79.2	.20	5.0	**C4LG6**	6	6	60
F4X4LG6	4.25 x 4.10	108.0 x 104.1	.20	5.0	**C4LG6**	6	6	60
F4X5LG6	4.25 x 5.10	108.0 x 129.5	.20	5.0	**C4LG6**	6	6	60

For white color replace LG (Light Gray) with WH (White).
Order number of feet required, in multiples of 6' or Standard Carton Quantity.
Height dimension includes duct with cover.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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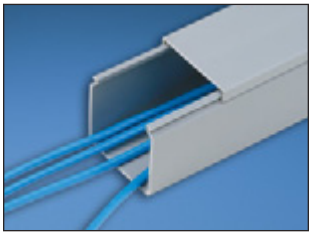
PANDUCT® Type FS – Solid Wall Raceway

Specifications

- Material: Lead-free PVC
- UL Recognized continuous use temperature: 122°F (50°C)
- UL 94 flammability rating of V-0
- Supplied without mounting holes

Features and Benefits

- Solid wall design fully encloses cables providing maximum protection and aesthetics
- Non-slip cover will not slide easily when installed on duct base
- Flush cover design holds more wires than traditional duct designs
- Base scoreline allows full wire carrying capacity at wiring duct junctions such as tees and corners
- Specially formulated lead-free material eliminates health concerns associated with PVC which contains lead



	Part Number	Duct Size (W x H) In.	Duct Size (W x H) mm	Cover Part Number	Length Ft.	Std. Pkg. Qty.	Std. Ctn. Qty.
>	FS.5X.5LG6NM	.69 x .60	17.5 x 15.2	C.5LG6	6	6	120
>	FS.5X1LG6NM	.69 x 1.06	17.5 x 26.9	C.5LG6	6	6	120
	FS.75X.75LG6NM	.93 x .82	23.6 x 20.8	C.75LG6	6	6	120
>	FS1X1LG6NM	1.26 x 1.12	32.0 x 28.4	C1LG6	6	6	120
>	FS1X1.5LG6NM	1.26 x 1.62	32.0 x 41.1	C1LG6	6	6	120
	FS1X2LG6NM	1.26 x 2.12	32.0 x 53.8	C1LG6	6	6	120
	FS1X3LG6NM	1.26 x 3.12	32.0 x 79.2	C1LG6	6	6	120
	FS1X4LG6NM	1.26 x 4.10	32.0 x 104.1	C1LG6	6	6	60
>	FS1.5X1LG6NM	1.75 x 1.12	44.5 x 28.4	C1.5LG6	6	6	120
>	FS1.5X1.5LG6NM	1.75 x 1.62	44.5 x 41.1	C1.5LG6	6	6	120
>	FS1.5X2LG6NM	1.75 x 2.12	44.5 x 53.8	C1.5LG6	6	6	120
>	FS1.5X3LG6NM	1.75 x 3.12	44.5 x 79.2	C1.5LG6	6	6	120
>	FS2X1LG6NM	2.25 x 1.12	57.2 x 28.4	C2LG6	6	6	120
	FS2X1.5LG6NM	2.25 x 1.62	57.2 x 41.1	C2LG6	6	6	120
>	FS2X2LG6NM	2.25 x 2.12	57.2 x 53.8	C2LG6	6	6	120
>	FS2X3LG6NM	2.25 x 3.12	57.2 x 79.2	C2LG6	6	6	60
	FS2X4LG6NM	2.25 x 4.10	57.2 x 104.1	C1LG6	6	6	60
>	FS3X1LG6NM	3.25 x 1.12	82.6 x 28.4	C3LG6	6	6	120
>	FS3X2LG6NM	3.25 x 2.12	82.6 x 53.8	C3LG6	6	6	120
>	FS3X3LG6NM	3.25 x 3.12	82.6 x 79.2	C3LG6	6	6	60
	FS3X4LG6NM	3.25 x 4.10	82.6 x 104.1	C3LG6	6	6	60
	FS3X5LG6NM	3.25 x 5.10	82.6 x 129.5	C3LG6	6	6	60
>	FS4X2LG6NM	4.25 x 2.12	108.0 x 53.8	C4LG6	6	6	60
>	FS4X3LG6NM	4.25 x 3.12	108.0 x 79.2	C4LG6	6	6	60
>	FS4X4LG6NM	4.25 x 4.10	108.0 x 104.1	C4LG6	6	6	60
>	FS4X5LG6NM	4.25 x 5.10	108.0 x 129.5	C4LG6	6	6	60
>	FS6X4LG6NM	6.25 x 4.15	158.8 x 105.4	C6LG6	6	6	60

>Indicates parts available with mounting holes. Remove NM from part number.
For other colors replace LG (Light Gray) with WH (White) or BL (Black), available in selected sizes.
Order number of feet required, in multiples of 6' or Standard Carton Quantity.
Height dimension includes duct with cover.

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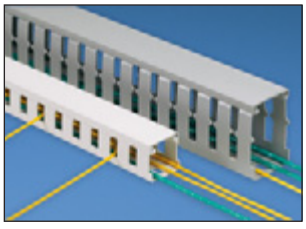
PANDUCT® Type NNC – Halogen-Free Metric Wiring Duct

Specifications

- Material: Halogen-free as verified with IEC 60754-2 test method (test on gases evolved during combustion of electric cables)
- UL Recognized continuous use temperature: 203°F (95°C)
- UL 94 flammability rating of V-0
- Conforms with NFPA 79-2007 section 13.13.1 requirement for flame retardant material
- Provided with DIN 43 659 mounting holes
- Metric sizing and finger progression
- Duct and cover packaged together in 2m lengths

Features and Benefits

- Halogen-free material eliminates safety and environmental concerns associated with halogenated materials
- Suitable for applications in elevated temperature environments
- *PANDUIT* exclusive rounded edges will not cut hands or abrade wiring insulation
- Non-slip cover will not slide easily when installed on duct base
- Double scoreline saves installation time and lowers installed cost
- Restricted slot design retains wire in slot for fast, easy wire installation or removal



Part Number	Duct Size (W x H)		Replacement Cover Part Number	Length	Duct Std. Ctn. Qty.	Cover Std. Ctn. Qty.
	In.	mm		M		
NNC25X25LG2	.97 x .93	24.6 x 23.6	**NC25LG2**	2	20	20
NNC25X37LG2	.97 x 1.41	24.6 x 35.8	**NC25LG2**	2	20	20
NNC25X50LG2	.97 x 1.88	24.6 x 47.8	**NC25LG2**	2	20	20
NNC25X75LG2	.97 x 2.85	24.6 x 72.4	**NC25LG2**	2	20	20
NNC37X37LG2	1.46 x 1.41	37.1 x 35.8	**NC37LG2**	2	20	20
NNC37X50LG2	1.46 x 1.88	37.1 x 47.8	**NC37LG2**	2	20	20
NNC37X75LG2	1.46 x 2.85	37.1 x 72.4	**NC37LG2**	2	20	20
NNC50X50LG2	1.95 x 1.88	49.5 x 47.8	**NC50LG2**	2	20	20
NNC50X75LG2	1.95 x 2.85	49.5 x 72.4	**NC50LG2**	2	10	20
NNC50X100LG2	1.95 x 3.85	49.5 x 97.8	**NC50LG2**	2	10	20
NNC75X75LG2	2.94 x 2.85	74.7 x 72.4	**NC75LG2**	2	10	20
NNC100X50LG2	3.92 x 1.88	99.6 x 47.8	**NC100LG2**	2	10	20
NNC100X75LG2	3.92 x 2.85	99.6 x 72.4	**NC100LG2**	2	10	20
NNC100X100LG2	3.92 x 3.85	99.6 x 97.8	**NC100LG2**	2	10	20

For white color replace LG (Light Gray) with WH (White).
DO NOT allow cutting, tapping or cleaning fluids that contain hydrocarbons to come in contact with type NNC wiring duct as it will cause stress cracking.
Order by total number of meters required, in multiples of Standard Carton Quantity.
Height dimension includes duct with cover.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PANDUCT® Type FL – Flexible Wiring Duct

Specifications

- Material: Flexible Polypropylene
- UL Recognized continuous use temperature: 149°F (65°C)
- UL 94 flammability rating of V-2
- Factory applied adhesive tape provided for easy mounting

Features and Benefits

- The flexibility of type FL wiring duct allows it to be used in applications where conventional rigid PVC duct cannot
- One-piece design with enclosing fingers simplifies insertion and removal of wiring



Part Number	Duct Size (W x H)		Length		Std. Pkg. Qty.
	In.	mm	In.	mm	
FL12X12LG-A	.49 x .49	12.5 x 12.5	19.7	500	112
FL25X25LG-A	.98 x .98	25.0 x 25.0	19.7	500	70
FL50X50LG-A	1.97 x 1.97	50.0 x 50.0	19.7	500	32

Available in LG (RAL 7040 Light Gray) color only.

PANDUCT® Installation Tools

- DCT easily cuts any PANDUCT® Duct and Cover
- DNT-100 notches duct sidewalls to bottom scoreline for tees and corner junctions
- TNR installs *PANDUIT* nylon rivets (NR1) quickly and easily
- DFCT easily removes duct fingers in tight places



DCT



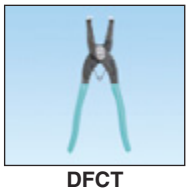
DNT-100



TNR



NR1-C



DFCT

Part Number	Part Description	Std. Pkg. Qty.
Duct Cutting Tool (For use with all duct/raceway types)		
DCT	Hand-held duct cutting tool.	1
Duct Finger Cutting Tool (For use with all wide slotted duct types)		
DFCT	Hand-held duct finger cutting tool.	1
Replacement Blade Kit (Includes blade and nylon insert)		
DCT-BLD	Replacement blade kit with blade and nylon insert.	1
Replacement Nylon Insert		
DCT-RI	Replacement nylon insert.	5
Duct Notching Tool (For use with all slotted duct types)		
DNT-100	Hand-held sidewall notching tool.	1
Nylon Rivet Installation Tool		
TNR	Hand-held nylon rivet installation tool.	1
Nylon Rivets		
NR1-C	Nylon rivet for use with TNR rivet tool.	100
NR1-M	Nylon rivet for use with TNR rivet tool.	1000

Always use approved safety goggles when using any tools.

PANDUIT NR-1 Rivet Performance
Application: *PANDUIT* NR-1 rivets used to install *PANDUIT* wiring duct to 0.075" thick metal panel through 3/16" drilled hole.

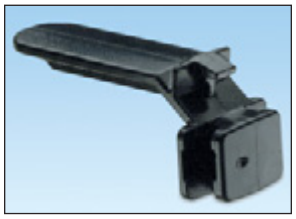
PANDUIT Duct Types Tested	PVC Wiring Duct	Noryl Duct (Type NE)
Mean pull-off force	90 lbs.	70 lbs.
Mean shear force	139 lbs.	126 lbs.

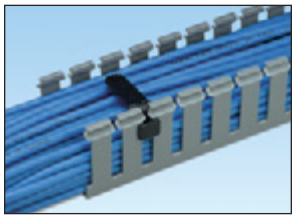
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B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
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E. Industrial
F1. Labeling & Identification
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PANDUCT® Type G and Type H Wiring Duct Wire Retainers

- Insert between fingers of type G and H wiring duct to contain wiring when cover is removed
- Adjustable height
- Material: ABS



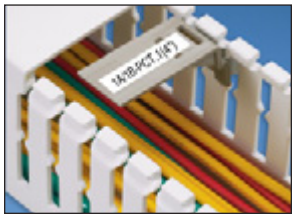


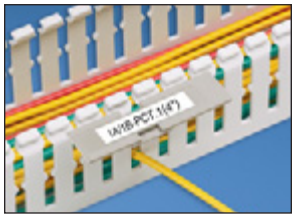
Part Number	For Duct Width In. (mm)	For Duct Height In. (mm)	Std. Pkg. Qty.	Std. Ctn. Qty.
WR2-C*	2.00 (50.8)	2.00 – 4.00 (50.8 – 101.6)	100	1000
WR3-C	3.00 (76.2)	2.00 – 4.00 (50.8 – 101.6)	100	1000
WR4-C	4.00 (101.6)	2.00 – 4.00 (50.8 – 101.6)	100	1000
WR5-C	Use with: 3x5, 4x5 or 6x4	Use with: 3x5, 4x5 or 6x4	100	1000

*For 2" width type H hinged cover wiring duct use part No. WR2H-C.

PANDUCT® Type F Duct Wire Retainers/Labeling Device

- For use with type F wiring duct to contain wiring when cover is removed
- Can also be used as a labeling device and be clearly identified with *PANDUIT* identification and labeling solutions; reference pages F1.1 – F1.18
- FWR-C works with all type F wiring duct sizes
- Material: Lead-free PVC





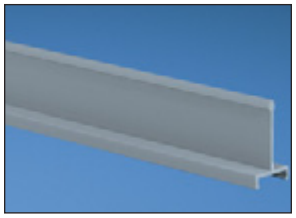
Part Number	Material	For Duct Width		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm		
FWR-C	Rigid PVC	1.50 – 4.00	37.0 – 76.2	100	1000

Full length for use with 4" wide duct. For smaller widths, break off segments at scorelines.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PANDUCT® Divider Wall

- Wiring duct divider wall can be mounted inside any type of *PANDUIT* PVC wiring duct to create multiple channels
- Simply install the divider wall base when mounting the duct and snap the divider wall onto the mounting base accessory (shown below)
- All versions snap onto DB-C mounting base
- Divider wall heights 2" and greater have a scoreline feature allowing sections to be removed leaving a smooth edge



D*H6 and D*H2



SD*H6

Part Number	For Nominal Duct Height In.	For Nominal Duct Height mm	Std. Pkg. Qty.	Std. Ctn. Qty.
***PANDUCT*® Solid Divider Wall**				
D1H6	1.00	25	6	120
D1.5H6	37	37	6	120
D2H6	2.00	50	6	120
D3H6	3.00	75	6	120
D4H6	4.00	100	6	120
***PANDUCT*® Slotted Divider Wall**				
SD2H6	2.00	50	6	120
SD3H6	3.00	75	6	120
SD4H6	4.00	100	6	120

Note: Must be used with mounting base (DB-C) which is sold separately.
Order number of feet required, in multiples of 6' or Standard Carton Quantity.



DB-C

Part Number	Used with Anchors	Std. Pkg. Qty.	Std. Ctn. Qty.
***PANDUCT*® Divider Wall Mounting Base**			
DB-C	*PANDUIT* NR1 or #8 or #10 screw	100	1000

Install mounting bases to the duct channel, locate within 2" of each divider wall end and at least every 12" along the length.

PANDUCT® Type NNC – Divider Wall

- NNC divider wall can be mounted inside NNC and NE wiring duct to create multiple channels
- Material: Halogen-free modified PPO
- Simply install the divider wall base when mounting the duct and snap the divider wall onto mounting base, DB-C



NNC**DWH2

Part Number	For Nominal Duct Height In.	For Nominal Duct Height mm	Length (m)	Std. Ctn. Qty. (m)
NNC50DWH2	2.00	50	2	40
NNC75DWH2	3.00	75	2	40

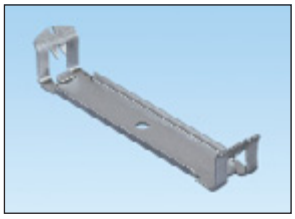
Available in WH (White) color only.
Note: Must be used with mounting base, DB-C (see page F2.11) which is sold separately. Install mounting bases to the duct channel, locate within 2" of each divider wall end and at least 12" along the length.

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PANDUCT® Snap-Clip Mounting Brackets

- Duct easily snaps into bracket
- No mounting holes required in duct
- Ensures no metal is inside the duct
- Snap-clip spacing is not critical
- Simplifies fabrication drawings and panel layout



Part Number	Screw Required	For Duct Width In.	For Duct Width mm	Std. Pkg. Qty.	Std. Ctn. Qty.
Snap-Clip Mounting Brackets for use with Types G, F and FS Wiring Duct					
S1F-C	#8-32x1/4 (Provided)	1.00	25.4	100	1000
S1.5F-C		1.50	38.1	100	1000
S2F-C		2.00	50.8	100	1000
S3F-C		3.00	76.2	100	1000
S4F-C		4.00	101.6	100	1000
Snap-Clip Mounting Brackets for use with Type NNC Wiring Duct					
SNS25F-C	#8-32x1/4 (User Supplied)	1.00	25	100	1000
SNS37F-C		1.50	37	100	1000
SNS50F-C		2.00	50	100	1000
SNS62F-C		2.50	62	100	1000
SNS75F-C		3.00	75	100	1000

Adhesive Tape for Wiring Duct

- Acrylic foam tape

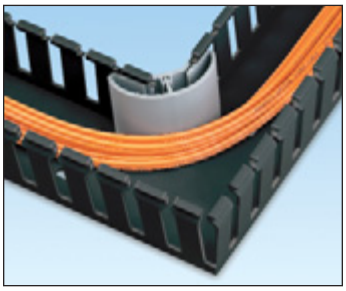


Duct Size W x H	Tape Part Number	Roll Length Yds.	Roll Length m	Std. Pkg. Qty.	Std. Ctn. Qty.
.5x.5 – 1.5x4	**P32W2A2-50-7**	7.0	6.4	1	100
	P32W2A2-50-72	72.0	65.5	1	9
2x1 – 3x3	**P32W2A2-50-7**	7.0	6.4	1	100
	P32W2A2-50-72	72.0	65.5	1	9
3x4 – 3x5	**P32W2A2-75-7**	7.0	6.4	1	60
	P32W2A2-75-72	72.0	65.5	1	7
4x1.5 – 4x3	**P32W2A2-50-7**	7.0	6.4	1	100
	P32W2A2-75-72	72.0	65.5	1	9
4x4 – 6x4	**P32W2A2-75-7**	7.0	6.4	1	60
	P32W2A2-75-72	72.0	65.5	1	7

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PANDUCT® Duct Corner Strip with 1" Bend Radius Control

- Creates a strong rigid corner at wiring duct junctions
- Provides bend radius protection for cabling as required in NFPA 79-2007 section 13.1.5.9 and TIA/EIA-568-B and 569-A
- Available in five pre-cut sizes and 6' lengths that can be cut-to-size to meet any size requirement
- Easy to install two-piece design
- Compatible with all styles of *PANDUIT* wiring duct
- Material: Lead-free PVC



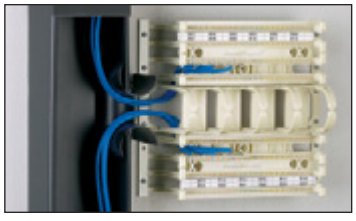


Part Number	Part Description	For Duct Height		Color	Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm			
6' Lengths for use with all Types of PVC Wiring Duct						
CSC1LG6	Cut-to-size 6' corner strip with a 1" bend radius.	All sizes (Cut to duct height)	All sizes (Cut to duct height)	Light Gray	6	120
CSC1WH6				White	6	120
CSC1BL6				Black	6	120
Pre-Cut Pieces for use with all Types of PVC Wiring Duct						
CSPC1LG-Q	1" bend radius corner strip pre-cut for 1" wall height.	1.00	25.4	Light Gray	25	250
CSPC1.5LG-Q	1" bend radius corner strip pre-cut for 1.5" wall height (2.0" Type H duct).	1.50	38.1		25	250
CSPC2LG-Q	1" bend radius corner strip pre-cut for 2" wall height.	2.00	50.8		25	250
CSPC3LG-Q	1" bend radius corner strip pre-cut for 3" wall height.	3.00	76.2		25	250
CSPC4LG-Q	1" bend radius corner strip pre-cut for 4" wall height.	4.00	101.6		25	250

CSPC available in Light Gray color only.
Order number of feet required, in multiples of 6' or Standard Package Quantity.

FIBER-DUCT™ Bend Radius Control Trumpets

- Available for 2" and 4" wall height type G slotted wall wiring duct and type FS solid wall raceway
- TRC2HDBL is available for 2" wall height type H hinged cover wiring duct
- Provide method to transition cabling from wall mounted hardware to wiring duct channel
- Maintain complete 1" bend radius control

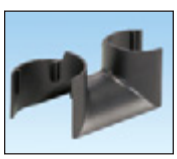


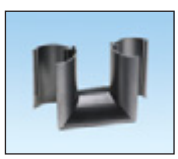


TRC2BL



TRC4BL





Part Number	Part Description	For Duct Height		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm		
TRC2BL	Bend radius control trumpet for exiting at the sidewall of 2" wall heights of type G or FS wiring duct channel.	2.00	50.8	1	10
TRC4BL	Bend radius control trumpet for exiting at the sidewall of 4" wall heights of type G or FS wiring duct channel.	4.00	101.6	1	10
TRC2HDBL	Bend radius control trumpet for exiting at the sidewall of 2" wall heights of type H hinged cover wiring duct channels.	2.00	50.8	1	10
TRC4HDBL	Bend radius control trumpet for exiting at the sidewall of 4" wall heights of type H hinged cover wiring duct channels.	4.00	101.6	1	10

All product color is Black.

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PANDUCT® Type G, F and FS Wiring Duct – Wirefill Capacity

Nominal Duct Size (W x H) inches	Nominal Area In.²	Electrical															Communication				
		8 AWG	10 AWG	12 AWG			14 AWG			16 AWG			18 AWG			22 AWG	23 AWG		23/24 AWG	24 AWG	Fiber Cable
		.216	.164	.130	.141	.152	.111	.124	.133	.096	.111	.118	.084	.100	.106	.085	.310	.354	.250	.188	.118
		THHN	THHN	THHN	MTW	MTW	THHN	MTW	MTW	TFFN	MTW	MTW	TFFN	MTW	MTW	MTW	Augmented Category 6		Cat. 6	Cat. 5e	3.0mm
.5 x .5	.250	3	5	8	7	6	11	9	8	15	11	10	20	14	12	19	1	1	2	4	10
.5 x 1	.500	6	10	16	14	12	23	18	16	31	23	20	40	28	25	39	2	2	4	8	20
.5 x 2	1.000	12	21	33	28	24	46	37	32	62	46	41	80	57	50	79	5	4	9	16	40
.5 x 4	2.000	24	42	67	57	49	92	74	64	124	92	82	161	114	101	158	11	9	18	32	81
.75 x .75	.563	6	11	19	16	13	26	20	18	34	26	23	45	32	28	44	3	2	5	9	23
.75 x 1	.750	9	15	25	21	18	34	27	24	46	34	30	60	42	38	59	4	3	6	12	30
.75 x 1.5	1.125	13	23	38	32	27	52	41	36	69	52	46	91	64	57	88	6	5	10	18	46
.75 x 2	1.500	18	31	50	43	37	69	55	48	93	69	61	121	85	76	118	8	6	13	24	61
1 x 1	1.000	12	21	33	28	24	46	37	32	62	46	41	80	57	50	79	5	4	9	16	40
1 x 1.5	1.500	18	31	50	43	37	69	55	48	93	69	61	121	85	76	118	8	6	13	24	61
1 x 2	2.000	24	42	67	57	49	92	74	64	124	92	82	161	114	101	158	11	9	18	32	81
1 x 3	3.000	36	63	101	86	74	139	111	96	186	139	123	242	171	152	237	17	13	27	48	122
1 x 4	4.000	48	84	135	114	98	185	148	129	248	185	164	323	228	203	316	23	18	36	64	163
1.5 x 1	1.500	18	31	50	43	37	69	55	48	93	69	61	121	85	76	118	8	6	13	24	61
1.5 x 1.5	2.250	27	47	76	64	55	104	83	72	139	104	92	182	128	114	177	13	10	20	36	92
1.5 x 2	3.000	36	63	101	86	74	139	111	96	186	139	123	242	171	152	237	17	13	27	48	122
1.5 x 3	4.500	55	95	152	129	111	208	167	145	279	208	184	364	257	228	355	26	20	41	72	184
1.5 x 4	6.000	73	127	202	172	148	278	222	193	372	278	246	485	342	305	474	35	27	54	97	245
2 x 1	2.000	24	42	67	57	49	92	74	64	124	92	82	161	114	101	158	11	9	18	32	81
2 x 1.5	3.000	36	63	101	86	74	139	111	96	186	139	123	242	171	152	237	17	13	27	48	122
2 x 2	4.000	48	84	135	114	98	185	148	129	248	185	164	323	228	203	316	23	18	36	64	163
2 x 3	6.000	73	127	202	172	148	278	222	193	372	278	246	485	342	305	474	35	27	54	97	245
2 x 4	8.000	97	169	270	229	197	371	297	258	496	371	328	647	457	406	632	47	36	73	129	327
2 x 5	10.000	122	212	338	287	247	463	371	323	620	463	410	809	571	508	790	59	45	91	161	409
2.5 x 3	7.500	91	159	253	215	185	347	278	242	465	347	307	607	428	381	593	44	34	68	121	307
3 x 1	3.000	36	63	101	86	74	139	111	96	186	139	123	242	171	152	237	17	13	27	48	122
3 x 2	6.000	73	127	202	172	148	278	222	193	372	278	246	485	342	305	474	35	27	54	97	245
3 x 3	9.000	110	191	304	258	222	417	334	290	558	417	369	728	514	457	711	53	41	82	145	368
3 x 4	12.000	146	254	405	344	296	556	445	387	744	556	492	971	685	610	949	71	54	109	194	491
3 x 5	15.000	183	318	507	431	370	695	557	484	930	695	615	1214	857	762	1186	89	68	137	242	614
4 x 1.5	6.000	73	127	202	172	148	278	222	193	372	278	246	485	342	305	474	35	27	54	97	245
4 x 2	8.000	97	169	270	229	197	371	297	258	496	371	328	647	457	406	632	47	36	73	129	327
4 x 3	12.000	146	254	405	344	296	556	445	387	744	556	492	971	685	610	949	71	54	109	194	491
4 x 4	16.000	195	339	540	459	395	742	594	516	992	742	656	1295	914	813	1265	95	72	146	258	655
4 x 5	20.000	244	424	676	574	494	927	743	646	1240	927	820	1619	1142	1017	1581	118	91	182	323	819
6 x 4	24.000	293	509	811	689	593	1113	891	775	1488	1113	984	1943	1371	1220	1898	142	109	219	388	983

Table shows maximum wire fill based on 50% of duct internal cross sectional area.
Formula = Nominal Area/1.75 x D².

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PANDUCT® Type H and HS Wiring Duct – Wirefill Capacity

Nominal Duct Size (W x H) inches	Nominal Area In.²	Electrical															Communication				
		8 AWG	10 AWG	12 AWG			14 AWG			16 AWG			18 AWG			22 AWG	23 AWG		23/24 AWG	24 AWG	Fiber Cable
		.216	.164	.130	.141	.152	.111	.124	.133	.096	.111	.118	.084	.100	.106	.085	.310	.354	.250	.188	.118
		THHN	THHN	THHN	MTW	MTW	THHN	MTW	MTW	TFFN	MTW	MTW	TFFN	MTW	MTW	MTW	Augmented Category 6		Cat. 6	Cat. 5e	3.0mm
1.5 x 2	3.000	34	60	95	81	70	131	105	91	175	131	116	229	162	144	224	16	12	25	45	116
1.5 x 3	4.500	52	90	143	122	105	197	158	137	263	197	174	344	243	216	336	25	19	38	68	174
2 x 2	4.000	46	80	127	108	93	175	140	122	234	175	155	306	216	192	299	22	17	34	61	154
2 x 3	6.000	69	120	191	163	140	263	210	183	351	263	232	459	324	288	448	33	25	51	91	232
2 x 4	8.000	92	160	255	217	187	350	281	244	469	350	310	612	432	384	598	44	34	69	122	309
3 x 3	9.000	104	180	287	244	210	394	316	275	527	394	349	689	486	432	673	50	38	77	137	348
3 x 4	12.000	139	241	383	326	280	526	421	366	703	526	465	919	648	577	897	67	51	103	183	464
4 x 4	16.000	185	321	511	435	374	701	562	488	938	701	621	1225	864	769	1197	89	69	138	244	619

Table shows maximum wire fill based on 50% of duct internal cross sectional area.
Formula = Nominal Area/1.85 x D².

PANDUCT® Type NNC Wiring Duct – Wirefill Capacity

Nominal Duct Size (W x H) mm	Nominal Area mm²	Electrical															Communication				
		8 AWG	10 AWG	12 AWG			14 AWG			16 AWG			18 AWG			22 AWG	23 AWG		23/24 AWG	24 AWG	Fiber Cable
		5.5	4.2	3.3	3.6	3.9	2.8	3.1	3.4	2.4	2.8	3.0	2.1	2.5	2.7	2.2	7.9	9.0	6.4	4.8	3.0
		THHN	THHN	THHN	MTW	MTW	THHN	MTW	MTW	TFFN	MTW	MTW	TFFN	MTW	MTW	MTW	Augmented Category 6		Cat. 6	Cat. 5e	
25 x 25	625	11	20	32	27	23	44	36	31	60	44	39	78	55	49	76	5	4	8	15	39
25 x 37	925	17	30	48	41	35	66	53	46	88	66	58	116	81	72	113	8	6	13	23	58
25 x 50	1250	23	41	65	55	47	89	72	62	120	89	79	156	110	98	153	11	8	17	31	79
25 x 62	1550	29	51	81	69	59	111	89	77	148	111	98	194	137	122	190	14	10	21	38	98
25 x 75	1875	35	61	98	83	71	134	108	93	180	134	119	235	166	147	229	17	13	26	46	119
37 x 37	1369	25	45	71	60	52	98	78	68	131	98	87	171	121	107	167	12	9	19	34	86
37 x 50	1850	35	60	96	82	70	132	106	92	177	132	117	232	163	145	226	17	13	26	46	117
37 x 62	2294	43	75	120	102	87	164	132	114	220	164	145	287	203	180	281	21	16	32	57	145
37 x 75	2775	52	91	145	123	106	199	159	138	266	199	176	348	245	218	340	25	19	39	69	176
50 x 50	2500	47	82	131	111	95	179	144	125	240	179	159	313	221	197	306	23	17	35	62	158
50 x 75	3750	71	123	196	167	143	269	216	187	360	269	238	470	332	295	459	34	26	53	93	238
50 x 100	5000	94	164	262	222	191	359	288	250	480	359	318	627	442	394	612	46	35	70	125	317
62 x 37	2294	43	75	120	102	87	164	132	114	220	164	145	287	203	180	281	21	16	32	57	145
62 x 62	3844	72	126	201	171	147	276	221	192	369	276	244	482	340	303	471	35	27	54	96	244
75 x 50	3750	71	123	196	167	143	269	216	187	360	269	238	470	332	295	459	34	26	53	93	238
75 x 62	4650	88	153	243	207	178	334	267	232	446	334	295	583	411	366	570	42	32	65	116	295
75 x 75	5625	106	185	294	250	215	404	324	281	540	404	357	706	498	443	689	51	39	79	140	357
75 x 100	7500	142	246	393	334	287	539	432	375	720	539	477	941	664	591	919	69	53	106	187	476
100 x 50	5000	94	164	262	222	191	359	288	250	480	359	318	627	442	394	612	46	35	70	125	317
100 x 62	6200	117	204	324	276	237	445	357	310	595	445	394	778	549	488	760	57	43	87	155	393
100 x 75	7500	142	246	393	334	287	539	432	375	720	539	477	941	664	591	919	69	53	106	187	476
100 x 100	10000	189	329	524	445	383	718	576	500	961	718	636	1255	885	788	1225	92	70	141	250	634

Table shows maximum wire fill based on 50% of duct internal cross sectional area.
Formula = Nominal Area/1.75 x D².

PANDUCT® Type FL Wiring Duct – Wirefill Capacity

Nominal Duct Size (W x H) mm	Nominal Area mm²	Electrical															Communication				
		8 AWG	10 AWG	12 AWG			14 AWG			16 AWG			18 AWG			22 AWG	23 AWG		23/24 AWG	24 AWG	Fiber Cable
		5.5	4.2	3.3	3.6	3.9	2.8	3.1	3.4	2.4	2.8	3.0	2.1	2.5	2.7	2.2	7.9	9.0	6.4	4.8	3.0
		THHN	THHN	THHN	MTW	MTW	THHN	MTW	MTW	TFFN	MTW	MTW	TFFN	MTW	MTW	MTW	Augmented Category 6		Cat. 6	Cat. 5e	
12 x 12	144	1	3	5	4	3	7	5	5	9	7	6	12	8	7	12	0	0	1	2	6
25 x 25	625	8	14	22	19	16	31	25	21	42	31	27	54	38	34	53	4	3	6	10	27
50 x 50	2500	33	57	91	77	67	125	100	87	168	125	111	219	155	137	214	16	12	24	43	111

Table shows maximum wire fill based on 50% of duct internal cross sectional area.
Formula = Nominal Area/1.75 x D². Not all sizes available for each duct type.

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Wirefill Formula (Flush Cover Duct Types G, F, FS, H, HS and NNC)

General Formula

PANDUIT wiring duct wirefills are calculated using the following general formula:

$$50\%\ \text{Wirefill} = 50\%\ \text{of} \left(\frac{\text{Usable Duct Area}}{\text{Wire Area}} \right)$$

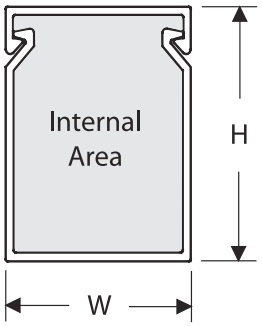
Why use a 50% Wirefill?

As specified in NFPA79-2002 section 14.5.2, *Percentage Fills of Raceways (Ducts),* a 50% wirefill is given as the maximum wirefill capacity in all *PANDUIT* wiring ducts. This helps ensure general safe wiring practices are followed. In actual practice, a 50% wirefill is the maximum amount of wiring the duct can hold given the additional airspace created between cables by non-uniform cable shapes, cable interlacing and cable packing factors.

What is the Usable Duct Area?

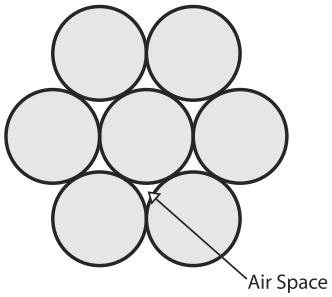
The usable area we define as the calculation of internal area that can be occupied by wires or cables.

Calculation of Internal Area



Since we use the outer channel dimensions in our calculation we make an adjustment in our formula for the thickness of material and for design elements that extend inside the channel.

Air Space Allotment



In our wirefill formula an adjustment is made to the channel internal area to account for "unusable" air space that will be present between cables when placed in the channel. Our formula assumes a uniform close packed or high density cable arrangement (see diagram)[1].

Considering these factors the usable duct area is equal to an average of 90% of the nominal area, or (W x H) x .90.

Wire Area

The wire area formula is converted to allow calculation using the cable diameter:

$$A_{WIRE} = \pi r^2$$
$$A_{WIRE} = (\pi/4) \times D^2$$
$$A_{WIRE} = .785 \times D^2$$

Formula Derivation

Inserting the elements from above into the general formula results in the following:

$$50\%\ \text{Wirefill} = .50 \left(\frac{(W \times H) \times .90}{.785 \times D^2} \right)$$

Simplifying this formula results in the formula used for wire fill calculation[2]:

$$50\%\ \text{Wirefill} = \left(\frac{W \times H}{1.75 \times D^2} \right)$$

Note: When calculating wirefill capacity using the above formula, variables W, H, and D must be expressed in same units (i.e. millimeters or inches).

[1] This calculation does not account for additional airspace created between cables by non-uniform cable shapes, cable interlacing, and cable packing factors.
[2] The resulting formula is used for all *PANDUIT* flush cover ducts, this excludes type NE duct which has a different profile design that results in a divisor of 2.0 x D^2 (rather than 1.75 x D^2 as shown here) and type H and HS wiring duct with a profile design that results in a divisor of 1.85 x D^2.

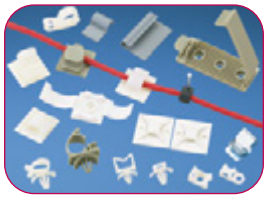
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A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

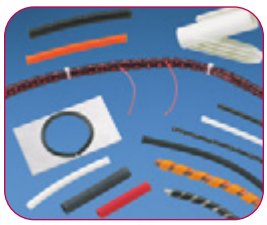
CABLE TIES AND ACCESSORIES

PANDUIT offers a full line of cable ties, cable management accessories, stainless steel and abrasion protection products to bundle, route, protect, insulate and identify cable in a variety of applications. With the most complete selection of cable ties and accessory products, *PANDUIT* provides innovative solutions to meet various application environments, customer needs, and industry standards.









- *PANDUIT* cable ties are ideal for networking applications; designs include a comprehensive line of hook and loop solutions, which allow frequent moves, adds, and changes; parallel-entry nylon ties are designed to protect cable; UL Listed solutions are offered for plenum use; and a variety of materials are designed for extreme weatherability and strength
- Supplying a comprehensive offering of mounts, clips, and clamps, as well as mounting options to meet various requirements; *PANDUIT* cable accessories speed and simplify installation for lowest installed cost
- *PANDUIT* stainless steel ties feature a revolutionary locking head design to provide stronger, safer, and easier to install bundling solutions, ideal for data center applications
- *PANDUIT* abrasion protection products offer a variety of sizes and materials to protect cables in indoor and outdoor applications

PANDUIT continues to design cable ties and accessory products for the evolving marketplace by solving customer problems with innovative products and reliable tooling to achieve lowest installed cost.

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G. Index

CABLE TIES

PANDUIT leads the industry in innovative, high performance solutions for bundling communications cable in a variety of network applications. The comprehensive range of products is designed to meet industry standards and customer requirements.



- *TAK-TY*® Hook & Loop Cable Ties are available in various styles and designed for applications demanding frequent moves, adds, and changes
- *ULTRA-CINCH*™ Hook & Loop Cable Ties with exclusive same-sided material provide unmatched bundling range; the low-profile, contoured cinch ring design reduces overall bundle size
- *TAK-TAPE*™ Hook & Loop Cable Tie Rolls have the strongest low profile material in the industry; they are available in two convenient roll sizes, and are perfect for general purpose bundling
- *CONTOUR-TY*® Cable Ties are ideal for sensitive data cabling, and are designed with outside teeth and smooth round edges to protect the cable jacket; the low profile, parallel-entry locking head limits exposure to sharp edges to protect installers from injury
- *DURA-TY*™ Cable Ties are a high performance solution with extreme weatherability and are Telcordia approved for service provider applications
- UL Listed solutions for horizontal cabling in air handling spaces include a comprehensive selection of Nylon 6.6 cable ties; HALAR▲ cable ties (94V-0 flammability rating) in the distinct maroon color; and hook and loop ties, in maroon and black, for plenum performance with high tensile strength

In addition to the complete offering of cable ties, *PANDUIT* provides a full line of cable tie installation tools that lead the industry in reliability and consistent performance. These tools provide consistent cable tie tension and a flush cable tie cut-off, which limits exposure to sharp edges. *PANDUIT* tools are designed to provide the lowest total installed cost.

▲HALAR is a registered trademark of Solvay Solexis, Inc.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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TAK-TY® Hook & Loop Cable Ties

- Broadest selection of sizes, styles, and colors to meet your application needs
- Adjustable, releasable, and reusable hundreds of times – ideal for applications requiring frequent moves, adds, or changes
- Hook and loop material maintains network data integrity by protecting against over-tensioning of high performance copper and fiber cables
- Easy to use and operator safe with no sharp edges
- Operating temperature range: 0°F to 220°F (-18°C to 104°C)
- Operating temperature range (HLTP/HLSP): 0°F to 122°F (-18°C to 50°C)
- Complementary mounts available, see page F3.26

Note: Minimum 2" overlap required to achieve loop tensile rating







Plenum-Rated Ties HLTP/HLSP (Flammability Rating UL 94V-2)

Part Number	Length In.	Length mm	Width In.	Width mm	Max. Bundle Dia. In.	Max. Bundle Dia. mm	Min. Loop Tensile Str. Lbs.	Min. Loop Tensile Str. N	Std. Pkg. Qty.	Std. Ctn. Qty.
Loop Ties – Slot allows for pre-wrapping of bundles										
HLT2I-X0	8.0	203	.500	12.7	1.91	49	40	178	10	100
HLT3I-X0	12.0	305	.500	12.7	3.18	81	40	178	10	100
UL Listed Loop Ties (Maroon) for plenum applications*										
HLTP2I-X12	8.0	203	.500	12.7	1.91	49	40	178	10	100
HLTP3I-X12	12.0	305	.500	12.7	3.18	81	40	178	10	100
Strip Ties – Perforated in convenient 6", 12", and 18" strips										
HLS1.5S-X0	6.0	152	.750	19.1	1.50	38	50	222	10	100
HLS3S-X0	12.0	305	.750	19.1	3.20	81	50	222	10	100
HLS5S-X0	18.0	457	.750	19.1	5.00	127	50	222	10	100
UL Listed Strip Ties (Maroon) for plenum applications*										
HLSP1.5S-X12	6.0	152	.750	19.1	1.50	38	50	222	10	100
HLSP3S-X12	12.0	305	.750	19.1	3.20	81	50	222	10	100
HLSP5S-X12	18.0	457	.750	19.1	5.00	127	50	222	10	100
15' and 75' Continuous Rolls – Can be cut to desired length, eliminating waste										
HLM-15R0	180.0	4,572	.330	8.4	Various	Various	18	80	1	10
HLS-15R0	180.0	4,572	.750	19.1	Various	Various	50	222	1	10
HLS-75R0	900.0	22,860	.750	19.1	Various	Various	50	222	1	10

*Also available in Black (-X0), which has an 18 lb. (80N) minimum loop tensile strength.
Note: Only HLTP/HLSP part numbers are UL Listed and CSA Certified.

ULTIMATE ID® Marker Ties

- Designed to efficiently support TIA/EIA-606-A standard labeling requirements
- Available in three styles:
  - Nylon 6.6 material
  - Hook and loop material – single tie
  - Hook and loop material – double tie
- Protective snap-on covers (UILC2CL-X) included for hook and loop parts
- Excellent solution for identifying and bundling UTP and fiber optic cable bundles

Note: Minimum 2" overlap required to achieve loop tensile rating



UICBM1M



UIHL12



UIHL22

Part Number	Length In.	Length mm	Max. Bundle Dia. In.	Max. Bundle Dia. mm	Min. Loop Tensile Str. Lbs.	Min. Loop Tensile Str. N	Material	Std. Pkg. Qty.	Std. Ctn. Qty.
UICBM1M-C	4.4	112	1.00	25	18	80	Nylon 6.6	100	1000
UIHL12-X0	5.6	142	1.00	25	15	67	Hook and loop	10	100
UIHL22-X0	5.6	142	1.00	25	15 / tie	67		10	100

Note: Part number UICBM1M-C shown in Material Availability Chart on Page F3.8.

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ULTRA-CINCH™ Hook & Loop Cable Ties

- Exclusive material with hooks and loops on same side allows user to secure a greater range of bundle diameters, including smaller bundles
- Hook and loop material maintains network data integrity by protecting against over-tensioning of high performance copper and fiber cables
- Improved low profile contoured cinch ring reduces overall bundle size
- Colors available to meet your application needs
- Adjustable, releasable, and reusable hundreds of times – ideal for applications requiring frequent moves, adds, or changes
- Easy to use and operator safe with no sharp edges
- Tapered tip facilitates easy, snag-free threading to speed installation
- Strong brass grommet (on UGCTC and UGCTE styles) assures reliable installations that resist pullout
- Use flat head screws for grommet applications to secure bundle to structure

Note: Minimum 2" overlap required to achieve loop tensile rating



Part Number	Length In.	Length mm	Width In.	Width mm	Max. Bundle Dia. In.	Max. Bundle Dia. mm	Min. Loop Tensile Str. Lbs.	Min. Loop Tensile Str. N	Std. Pkg. Qty.	Std. Ctn. Qty.
Cinch Ties										
UCT3S-X0	12.0	305	.850	21.6	3.00	76	50	222	10	100
UCT5S-X0	18.0	457	.850	21.6	5.00	127	50	222	10	100
Cinch Ties – Center Mount Grommet (Bundle is centered over mounting point)										
UGCTC3S-X0	12.0	305	.850	21.6	3.00	76	50	222	10	100
UGCTC5S-X0	18.0	457	.850	21.6	5.00	127	50	222	10	100
Cinch Ties – End Mount Grommet (Bundle is offset from mounting point)										
UGCTE3S-X0	12.0	305	.850	21.6	3.00	76	50	222	10	100
UGCTE5S-X0	18.7	475	.850	21.6	5.00	127	50	222	10	100

Note: 1/4" (6mm) diameter mounting hole on grommet style cinch ties.

Available in 8 Colors!



ULTRA-CINCH™ Tie Color Chart		
Color	**Part No. Suffix**	**Example**
Black	0	UCT3S-X0
Red	2	UCT3S-X2
Orange	3	UCT3S-X3
Yellow	4	UCT3S-X4
Green	5	UCT3S-X5
Blue	6	UCT3S-X6
Gray	8	UCT3S-X8
White	10	UCT3S-X10

Flat Head Screws for Grommet Cinch Ties

Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty
UCTGS1224-X	12-24 UNC x 5/8mm (.625") flat head phillips screw	10	100
UCTGSM5-X	M5 x 16mm flat head Phillips screw	10	100
UCTGSM6-X	M6 x 16mm flat head Phillips screw	10	100

TAK-TAPE™ Hook & Loop Cable Tie Rolls

- Strongest low profile material in the industry; thin and flexible to quickly wrap around bundles
- Cost effective for general purpose bundling
- Adjustable, releasable, and reusable
- Large continuous roll you can cut to size
- Operating temperature range: -22°F to 194°F (-30°C to 90°C)
- Handy, reusable plastic case (TTS20) keeps material clean
- Complementary mounts available (see page F3.26)

Note: Minimum 2" overlap required to achieve loop tensile rating





Part Number	Length Ft.	Length m	Width In.	Width mm	Max. Bundle Dia. In.	Max. Bundle Dia. mm	Min. Loop Tensile Str. Lbs.	Min. Loop Tensile Str. N	Std. Pkg. Qty.	Std. Ctn. Qty.
TTS-20R0	20	6.1	.750	19.1	Various	Various	40	178	1	10
TTS-35RX0	35	10.7	.750	19.1	Various	Various	40	178	1	10

Std. Pkg. Qty. of TTS-35RX0 denotes one package of ten 35' rolls.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Part Number System for Hook & Loop Cable Ties

HLT	2	I	—	X	0
Type	Size	Cross Section		Package Size	Color

Type

HL = Hook & Loop
HLM = HL Miniature
HLT = HL Loop Tie
HLTP = HL Loop Tie Plenum-Rated
HLS = HL Strip Tie
HLSP = HL Strip Tie Plenum-Rated
TTS = *TAK-TAPE*™ Standard
UCT = *ULTRA-CINCH*™ Tie
UGCTC = UCT Grommet Cinch Tie – Center Mount
UGCTE = UCT Grommet Cinch Tie – End Mount
UIHL12 = *ULTIMATE ID*® Single Tie
UIHL22 = *ULTIMATE ID*® Double Tie

Size

Approx. Maximum Bundle Dia. (In.)

Cross Section

I = Intermediate
S = Standard

Package Size

X = 10
15R = 15' Roll
20R = 20' Roll
35R = 35' Rolls (10)
75R = 75' Roll

Color

See chart below for colors available

Color Chart

Color	*PANDUIT* Suffix
Black	0
Red	2
Orange	3
Yellow	4
Green	5

Color	*PANDUIT* Suffix
Blue	6
Gray	8
White	10
Maroon	12

Part Number Availability List

Standard Packaging	
Part Number	**Color**
HLM-15R	0,2,3,4,5,6,8,10
HLS-15R	0,2,3,4,5,6,8,10
HLS-75R	0,2,3,4,5,6,8,10
HLS1.5S-X	0,2,3,4,5,6,8,10
HLS3S-X	0,2,3,4,5,6,8,10
HLS5S-X	0,2,3,4,5,6,8,10
HLSP1.5S-X	0,12
HLSP3S-X	0,12
HLSP5S-X	0,12
HLT2I-X	0,2,3,4,5,6,8,10
HLT3I-X	0,2,3,4,5,6,8,10
HLTP2I-X	0,12
HLTP3I-X	0,12
TTS-20R	0
TTS-35RX	0
UCT3S-X	0,2,3,4,5,6,8,10
UCT5S-X	0,2,3,4,5,6,8,10
UGCTC3S-X	0,2,3,4,5,6,8,10
UGCTC5S-X	0,2,3,4,5,6,8,10
UGCTE3S-X	0,2,3,4,5,6,8,10
UGCTE5S-X	0,2,3,4,5,6,8,10
UIHL12-X	0
UIHL22-X	0

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CONTOUR-TY® Cable Ties – Nylon 6.6

- Unique design prevents wire and cable damage
- Low profile head avoids snags and reduces overall bundle size
- Outside teeth and smooth round edges protect cable jacket – ideal for high vibration applications
- Parallel-entry limits exposure to sharp edges and protects workers' arms/hands
- Fully enclosed head for consistent strength
- Curved tip is easy to pick up from flat surfaces and allows faster initial threading to speed installation





Part Number	Length In.	Length mm	Width In.	Width mm	Max. Bundle Dia. In.	Max. Bundle Dia. mm	Min. Loop Tensile Str. Lbs.	Min. Loop Tensile Str. N	Recommended Installation Tool	Bulk Pkg. Qty.	Bulk Ctn. Qty.
Miniature Cross Section											
CBR1M-M	4.1	104	.098	2.5	1.00	25	18	80	GTS, GTSL, GS2B, PTS, PPTS, STS2	1000	50000
CBR1.5M-M	5.6	142	.098	2.5	1.50	38	18	80		1000	50000
CBR2M-M	7.2	183	.098	2.5	2.00	51	18	80		1000	25000
Intermediate Cross Section											
CBR1.5I-M	5.9	150	.140	3.6	1.50	38	40	178	GTS, GTSL, GS2B, PTS, PPTS, STS2	1000	25000
CBR3I-M	10.4	264	.140	3.6	3.00	76	40	178		1000	10000
CBR4I-M	13.6	345	.140	3.6	4.00	102	40	178		1000	10000
Standard Cross Section											
CBR2S-M	7.6	193	.190	4.8	2.00	51	50	222	GTS, GTSL, GS2B, GTH, GS4H, PTS, PTH, PPTS, STS2, STH2	1000	10000
CBR3S-M	10.8	274	.190	4.8	3.00	76	50	222		1000	5000
CBR4S-M	14.0	356	.190	4.8	4.00	102	50	222		1000	5000
Heavy-Standard Cross Section											
CBR2HS-D	8.0	203	.250	6.4	2.00	51	85	378	GTH, GS4H, GS4EH, PTH, STH2, ST3EH	500	5000
Light-Heavy Cross Section											
CBR4LH-TL	14.6	371	.300	7.6	4.00	102	120	534	GTH, GS4H, GS4EH, PTH, STH2, ST3EH	250	2500
CBR6LH-C	20.9	531	.300	7.6	6.00	152	120	534		100	2000

BELT-TY™ In-Line Cable Ties – Nylon 6.6

- Parallel-entry cable tie that threads like a belt (180° entry) limits exposure to sharp edges and protects workers' arms/hands
- Low profile head avoids snags and reduces overall bundle size
- 35% lower head height than conventional 90° ties
- Curved tip is easy to pick up from flat surfaces and allows faster initial threading to speed installation





Part Number	Length In.	Length mm	Width In.	Width mm	Max. Bundle Dia. In.	Max. Bundle Dia. mm	Min. Loop Tensile Str. Lbs.	Min. Loop Tensile Str. N	Recommended Installation Tool	Bulk Pkg. Qty.	Bulk Ctn. Qty.
Standard Cross Section											
ILT2S-M	8.3	211	.190	4.8	1.88	48	50	222	GTS, GTSL, GS2B, GTH, GS4H, PTS, PTH, PPTS, STS2, STH2	1000	10000
ILT3S-M	11.5	292	.190	4.8	3.00	76	50	222		1000	5000
ILT4S-M	14.7	373	.190	4.8	4.00	102	50	222		1000	5000
Light-Heavy Cross Section											
ILT4LH-TL	14.8	376	.300	7.6	4.00	102	120	534	GTH, GS4H, GS4EH, PTH, STH2, ST3EH	250	2500
ILT6LH-C	21.2	538	.300	7.6	6.00	152	120	534		100	2000

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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NEW! HYPER-V™ Cable Ties – Weather Resistant Nylon 6.6

- Fixed and flexible two-wedge locking design provides a low threading force
- Teeth on both sides of cable tie body provide additional locking strength and improved flexibility to conform to irregular bundle shapes such as securing cables to cable tray systems
- Releasable head position for temporary bundling of cables prior to final locking; no need to replace ties when adding cables/wires to the bundle
- Teeth on full length of body support a wide range of bundle diameters
- Bending serrations on the tip of the tie allows the tip to be easily formed into an arc, enabling installer to "fish" the tie around the bundle in a confined space
- Threading hole in the tip of the tie allows an installer to hook the tip with a simple device to pull the tie through spaces with limited access
- In-Line tie design for parallel-entry of the tie into head resulting in a lower profile on cable bundles
- Complementary mounts available, see page F3.28





Part Number	Length		Width		Max. Bundle Dia.		Min. Loop Tensile Str.		Recommended Installation Tool	Std. Pkg. Qty.	Std. Ctn. Qty.
	In.	mm	In.	mm	In.	mm	Lbs.	N			
HV965-C0	10.4	265	.350	8.9	2.60	65	160	710	GTH, GS4H, GS4EH, PTH, STH2, ST3EH, STHV	100	1000
HV9100-C0	14.4	367	.350	8.9	3.90	100	160	710		100	1000
HV9150-C0	20.7	525	.350	8.9	5.90	150	160	710		100	1000
HV9250-C0	33.1	841	.350	8.9	9.80	250	160	710		100	1000

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Part Number System for Parallel-Entry Cable Ties

CBR	2	S	—	M	
Type	**Size**	**Cross Section**		**Package Size**	**Color/Material**
CBR = Locking Tie ILT = Locking Tie	Approx. Maximum Bundle Dia. (In.)	M = Miniature I = Intermediate S = Standard HS = Heavy-Standard LH = Light-Heavy		C = 100 TL = 250 D = 500 M = 1000	See chart below for colors and materials available

HV	9	100	—	C	
Type	**Size**	**Size**		**Package Size**	**Color/Material**
HV = Locking Tie	Width Approx. Width (mm)	Approx. Maximum Bundle Dia. (mm)		C = 100	See chart below for colors and materials available

Material and Color Chart

Material	Color	*PANDUIT* Suffix
Nylon 6.6	Natural	✓
Weather Resistant Nylon 6.6	Black	0
Heat Stabilized Nylon 6.6	Black	30
Heat Stabilized Nylon 6.6	Natural	39
Flame Retardant Nylon 6.6	Natural (Ivory)	69

✓Denotes *PANDUIT* Natural Nylon 6.6 (no suffix required).

Material	Color	*PANDUIT* Suffix
Nylon 6.6	Brown	1
Nylon 6.6	Red	2
Nylon 6.6	Orange	3
Nylon 6.6	Yellow	4Y
Nylon 6.6	Green	5
Nylon 6.6	Blue	6
Nylon 6.6	Purple	7
Nylon 6.6	Gray	8

Part Number Availability List

Standard Packaging			Bulk Packaging		
Part Number	**Natural Nylon 6.6**	**Color/Material (Suffix)**	**Part Number**	**Natural Nylon 6.6**	**Color/Material (Suffix)**
			CBR1M-M	✓	0
			CBR1.5M-M	✓	0,30
			CBR2M-M	✓	0,1,2,3,4Y,5,6,7
			CBR1.5I-M	✓	0
			CBR3I-M	✓	0,1,2,3,4Y,5,6,7,8
			CBR4I-M	✓	0
			CBR2S-M	✓	0,30,39
			CBR3S-M	✓	0,30,69
			CBR4S-M	✓	0,30
			CBR2HS-D	✓	0
			CBR4LH-TL	✓	0,30
			CBR6LH-C	✓	0,30
			HV965-C		0
			HV9100-C		0
			HV9150-C		0
			HV9250-C		0
			ILT2S-M	✓	0
			ILT3S-M	✓	0
			ILT4S-M	✓	0
			ILT4LH-TL	✓	0
			ILT6LH-C	✓	0
UICBM1M-C	✓	0			

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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PAN-TY® Cable Ties – Nylon 6.6

- Versatile cable ties can be used in countless applications
- One-piece construction for consistent performance and reliability
- Lowest threading force of any one-piece cable tie in the industry
- Curved tip is easy to pick up from flat surfaces and allows faster initial threading to speed installation
- A variety of materials and colors available for specific applications





Part Number	Length In.	Length mm	Width In.	Width mm	Max. Bundle Dia. In.	Max. Bundle Dia. mm	Min. Loop Tensile Str. Lbs.	Min. Loop Tensile Str. N	Recommended Installation Tool	Std. Pkg. Qty.	Std. Ctn. Qty.
Miniature Cross Section											
PLT1M-C	3.9	99	.098	2.5	.87	22	18	80	GTS, GTSL, GS2B, PTS, PPTS, STS2	100	1000
PLT1.5M-C	5.6	142	.098	2.5	1.25	32	18	80		100	1000
PLT2M-C	8.0	203	.098	2.5	2.00	51	18	80		100	1000
Intermediate Cross Section											
PLT1.5I-C	5.6	142	.142	3.6	1.38	35	40	178	GTS, GTSL, GS2B, PTS, PPTS, STS2	100	1000
PLT2I-C	8.0	203	.142	3.6	2.00	51	40	178		100	1000
PLT2.5I-C	9.7	246	.145	3.7	2.50	64	40	178		100	1000
PLT3I-C	11.4	290	.145	3.7	3.00	76	40	178		100	1000
PLT4I-C	14.5	368	.145	3.7	4.00	102	40	178		100	1000
Standard Cross Section											
PLT1S-C	4.8	122	.190	4.8	1.00	25	50	222	GTS, GTSL, GS2B, GTH, GS4H, PTS, PPTS, PTH, STS2, STH2	100	1000
PLT1.5S-C	6.2	157	.190	4.8	1.50	38	50	222		100	1000
PLT2S-C	7.4	188	.190	4.8	1.88	48	50	222		100	1000
PLT2.5S-C	9.8	249	.190	4.8	2.50	64	50	222		100	1000
PLT3S-C	11.5	292	.190	4.8	3.00	76	50	222		100	1000
PLT4S-C	14.5	368	.190	4.8	4.00	102	50	222		100	1000
PLT4.5S-C	15.5	394	.190	4.8	4.50	114	50	222		100	1000
PLT5S-C	17.5	445	.190	4.8	5.00	127	50	222		100	500
Light-Heavy Cross Section (Straight Tip)											
PLT2H-L	8.1	206	.300	7.6	2.00	51	120	534	GTH, GS4H, GS4EH, PTH, STH2, ST3EH	50	500
PLT2.5H-L	9.8	251	.300	7.6	2.50	64	120	534		50	500
PLT3H-L	11.4	290	.300	7.6	3.00	76	120	534		50	500
PLT4H-L	14.5	368	.300	7.6	4.00	102	120	534		50	500
PLT6LH-L	21.9	556	.300	7.6	6.00	152	120	534		50	500
PLT7LH-L	24.7	627	.300	7.6	7.00	178	120	534		50	500
PLT8LH-L	27.6	701	.300	7.6	8.00	203	120	534		50	500
PLT9LH-L*	30.5	775	.300	7.6	9.00	229	120	534		50	500
PLT10LH-L*	34.3	871	.300	7.6	10.31	262	120	534		50	1000
Heavy Cross Section (Straight Tip)											
PLT5H-L*	17.7	450	.350	8.9	5.00	127	175	778	GTH, GS4H, GS4EH, PTH, STH2, ST3EH	50	500
PLT6H-L*	20.9	530	.350	8.9	6.00	152	175	778		50	500
PLT8H-L*	30.6	779	.350	8.9	9.00	229	175	778		50	500
PLT13H-Q*	43.3	1100	.350	8.9	13.00	330	175	778		25	500
Extra-Heavy Cross Section (Straight Tip)											
PLT5EH-Q	20.1	511	.500	12.7	5.00	127	250	1112	GS4EH, ST3EH	25	250
PLT6EH-Q	22.2	564	.500	12.7	6.00	152	250	1112		25	250



EH Series

*UL Listed – meets the requirements of UL 181B-C, for use with UL non-metallic air ducts and air connectors.

Notes: 1) UL Listed for use in plenum or air handling spaces per NEC except PLT.6SM, PLT5H/6H/8H/13H, and PLT5EH/6EH.
2) UL Recognized and CSA Certified except PLT5EH/6EH.

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PAN-TY® Cable Ties – HALAR▲ – Distinctive Maroon Color





- UL Listed for use in plenum or air handling spaces per NEC, Section 300-22 (C) and (D)
- Low smoke density and excellent flammability rating of UL 94V-0
- Commonly accepted solution for bundling qualified cable without conduit in air handling space applications
- Curved tip is easy to pick up from flat surfaces and allows faster initial threading to speed installation

Part Number	Length In.	Length mm	Width In.	Width mm	Max. Bundle Dia. In.	Max. Bundle Dia. mm	Min. Loop Tensile Str. Lbs.	Min. Loop Tensile Str. N	Recommended Installation Tool	Std. Pkg. Qty.	Std. Ctn. Qty.
Miniature Cross Section											
PLT1M-C702Y	4.0	102	.098	2.5	.87	22	18	80	GTS, GTSL, GS2B, PTS, PPTS, STS2	100	1000
Standard Cross Section											
PLT2S-C702Y	7.4	188	.190	4.8	1.88	48	50	222	GTS, GTSL, GS2B, GTH, GS4H, PTS, PTH, PPTS, STS2, STH2	100	1000
PLT3S-C702Y	11.6	295	.190	4.8	3.00	76	50	222		100	1000

▲HALAR is a registered trademark of Solvay Solexis, Inc.

PAN-TY® Clamp Ties – Nylon 6.6





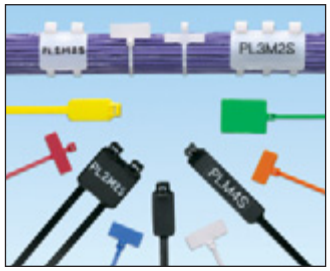
- Used to secure a cable bundle to another surface such as a control panel, communication rack, wall or ceiling
- Design allows for bundling before or after screwing clamp in place
- One-piece construction for consistent performance and reliability
- Curved tip is easy to pick up from flat surfaces and allows faster initial threading to speed installation

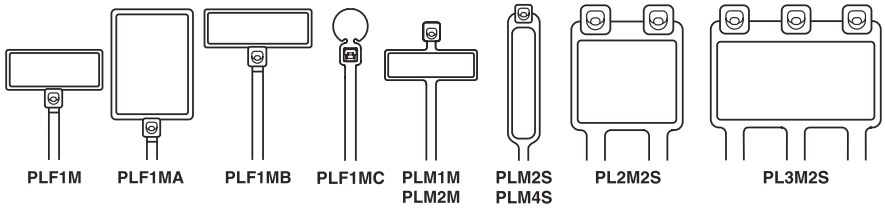
Part Number	Length In.	Length mm	Width In.	Width mm	Max. Bundle Dia. In.	Max. Bundle Dia. mm	Min. Loop Tensile Str. Lbs.	Min. Loop Tensile Str. N	Screw Size	Screw Size Metric	Recommended Installation Tool	Std. Pkg. Qty.	Std. Ctn. Qty.
Miniature Cross Section													
PLC1M-S4-C	4.3	109	.100	2.5	.75	19	18	80	#4	M2.5	GTS, GTSL, GS2B, PTS, PPTS, STS2	100	1000
Intermediate Cross Section													
PLC1.5I-S8-C	6.1	155	.135	3.4	1.25	32	40	178	#8	M4	GTS, GTSL, GS2B, PTS, PPTS, STS2	100	1000
Standard Cross Section													
PLC2S-S6-C	7.9	201	.190	4.8	1.84	47	50	222	#6	M3	GTS, GTSL, GS2B, GTH, GS4H, PTS, PTH, PPTS, STS2, STH2	100	1000
PLC2S-S10-C	7.9	201	.190	4.8	1.84	47	50	222	#10	M5		100	1000
PLC3S-S10-C	12.0	305	.190	4.8	3.00	76	50	222	#10	M5		100	1000
PLC4S-S10-C	15.0	381	.190	4.8	4.00	102	50	222	#10	M5		100	1000
Light-Heavy Cross Section													
PLC2H-S25-L	9.0	229	.300	7.6	2.00	51	120	534	1/4	M6	GTH, GS4H, GS4EH, PTH, STH2, ST3EH	50	500
PLC4H-S25-L	15.1	384	.300	7.6	4.00	102	120	534	1/4	M6		50	500

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

PAN-TY® Marker and Flag Ties – Nylon 6.6

- Used to fasten and identify bundles at the same time
- One-piece construction for consistent performance and reliability
- Can be marked with *PANDUIT* marker pens or custom imprinted using *PANDUIT* Custom Hot Stamping Service (shown below)
- Curved tip is easy to pick up from flat surfaces and allows faster initial threading to speed installation





Part Number	Marker Type	Length In.	Length mm	Width In.	Width mm	Marker Write-On Area In.	Marker Write-On Area mm	Max. Bundle Dia. In.	Max. Bundle Dia. mm	Min. Loop Tensile Str. Lbs.	Min. Loop Tensile Str. N	Recommended Installation Tool	Std. Pkg. Qty.	Std. Ctn. Qty.
Miniature Cross Section														
PLF1M-C	Flag	4.3	109	.098	2.5	.31 x .75	7.9 x 19.1	.87	22	18	80	GTS, GTSL, GS2B, PTS, PPTS, STS2	100	1000
PLF1MA-C	Flag	5.1	130	.098	2.5	.76 x 1.04	19.1 x 26.4	.87	22	18	80		100	1000
PLF1MB-C	Flag	4.0	101	.098	2.5	.31 x .92	7.9 x 23.4	.75	19	18	80		100	1000
PLF1MC-M	Flag	4.3	109	.098	2.5	.31 x .75	7.9 x 19.1	.87	22	18	80		100	1000
PLM1M-C	Wrap	3.9	99	.098	2.5	.26 x .95	6.6 x 24.1	.75	19	18	80		100	1000
PLM2M-C	Wrap	8.0	203	.098	2.5	.26 x .95	6.6 x 24.1	2.00	51	18	80		100	1000
Standard Cross Section														
PLM2S-C	Wrap	7.4	188	.185	4.7	.44 x .87	11.1 x 22.1	1.75	45	50	222	GTS, GTSL, GS2B, GTH, GS4H, PTS, PTH, PPTS, STS2, STH2	100	1000
PLM4S-C	Wrap	14.6	371	.185	4.7	.44 x 2.00	11.1 x 50.8	4.00	102	50	222		100	1000
PL2M2S-L	Wrap	7.4	188	.185	4.7	.87 x 1.07	22.1 x 27.2	1.75	45	50	222		50	500
PL3M2S-L	Wrap	7.4	188	.185	4.7	.87 x 1.79	22.1 x 45.5	1.75	45	50	222		50	500

Permanent Marking Pens

- Fast drying, permanent ink for identification on marker ties shown above and on page F3.18



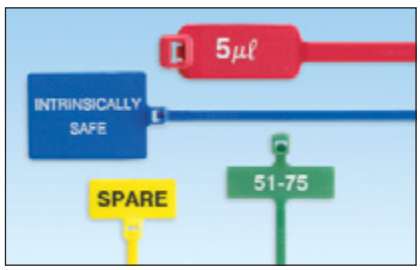
PX-0
PX-2



PFX-0
PFX-2

Part Number	Color	Description	Std. Pkg. Qty.	Std. Ctn. Qty.
PX-0	Black	Permanent marking pen – Regular Tip.	12	144
PX-2	Red	Permanent marking pen – Regular Tip.	12	144
PFX-0	Black	Permanent marking pen – Fine Tip.	12	144
PFX-2	Red	Permanent marking pen – Fine Tip.	12	144

HOT STAMPING SERVICE – Custom Printed Cable Ties – FAST! TWO WEEK LEAD TIME



Hot stamped cable ties are typically used for identification or labeling critical components. Custom hot stamping provides a permanent, high quality imprinted message on *PANDUIT* cable ties, marker ties, marker plates or marker straps to suit your application. Options include: choice of seven text colors, a variety of characters and fonts, sequential numbering and special customer logos and diagrams.

Minimum order: 5,000 pieces per part number and message
For hot stamping orders and inquiries, please call: 1-800-777-3300

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

Part Number System for *PAN-TY*® Cable Ties

PLT — **2** **S** — **C**

Type

PLT = Locking Tie
PRT = Releasable Tie
PLC = Locking Clamp
PLF = Locking Flag
PLM = Locking Marker
PLP = Locking Push Mount
PLWP = Locking Wing Push Mount
PRLWP = Releasable Ladder Wing Push Mount
PRWP = Releasable Wing Push Mount
PLUP = Locking Umbrella Push Mount

Size

Approx. Maximum Bundle Dia. (In.)

Cross Section

SM = Subminiature
M = Miniature
I = Intermediate
S = Standard
LH = Light-Heavy
H = Heavy
EH = Extra-Heavy

Screw Hole Size

(Clamp Ties Only)
-S4 = #4 (M2.5)
-S6 = #6 (M3)
-S8 = #8 (M4)
-S10 = #10 (M5)
-S25 = 1/4 (M6)

Package Size

Q = 25
L = 50
C = 100
TL = 250
D = 500
M = 1000
VMR = 2 reels/2500 ea.
XMR = 2 reels/5000 ea.

Color/Material

See chart below for colors and materials available

Material and Color Chart

Material	Color	*PANDUIT* Suffix
Nylon 6.6	Natural	✓
Weather Resistant Nylon 6.6	Black	0
Weather Resistant Nylon 6.6 (meets Mil Spec)	Black	00
Nylon 6.6	Brown	1
Nylon 6.6	Red	2
Nylon 6.6	Orange	3
Nylon 6.6	Yellow	4Y
Nylon 6.6	Green	5
Nylon 6.6	Blue	6
Nylon 6.6	Purple	7
Nylon 6.6	Gray	8
Nylon 6.6	White	10
Nylon 6.6	Telephone Gray	14
Nylon 6.6	Black	20

Material	Color	*PANDUIT* Suffix
Heat Stabilized Nylon 6.6	Black	30
Heat Stabilized Nylon 6.6	Natural	39
Nylon 6.6	Fluorescent Orange	53
Nylon 6.6	Fluorescent Yellow	54
Nylon 6.6	Fluorescent Green	55
Nylon 6.6	Fluorescent Pink	59
Flame Retardant Nylon 6.6	Black	60
Flame Retardant Nylon 6.6	Natural (Ivory)	69
TEFZEL■	Aqua Blue	76
Weather Resistant Polypropylene	Black	100
Polypropylene	Green	109
Nylon 12	Black	120
Heat Stabilized Weather Resistant Nylon 6.6	Black	300
HALAR▲	Maroon	702Y

✓ Denotes *PANDUIT* Natural Nylon 6.6 (no suffix required).
■ TEFZEL is a registered trademark of E.I. du Pont de Nemours and Company.
▲ HALAR is the registered trademark of Solvay Solexis, Inc.

Part Number Availability List

Standard Packaging			Bulk Packaging		
Part Number	**Natural Nylon 6.6**	**Color/Material Suffix**	**Part Number**	**Natural Nylon 6.6**	**Color/Material Suffix**
PLC1M-S4-C	✓	0	**PLC1M-S4-M**	✓	0,30
PLC1.5I-S8-C	✓	0	**PLC1.5I-S8-M**	✓	0,30
PLC2S-S6-C	✓	0	**PLC2S-S6-M**	✓	0
PLC2S-S10-C	✓	0,14	**PLC2S-S10-M**	✓	0,20,30
PLC3S-S10-C	✓	0	**PLC3S-S10-M**	✓	0
PLC4S-S10-C	✓	0	**PLC4S-S10-M**	✓	0,30
PLC2H-S25-L	✓		**PLC2H-S25-TL**	✓	0,30
PLC4H-S25-L	✓	0	**PLC4H-S25-TL**	✓	0,30
PLF1M-C	✓	0	**PLF1M-M**	✓	0,2,3,4Y,6,10,69
PLF1MA-C	✓	3,4Y	**PLF1MA-M**	✓	0,2,3,4Y,5,6,10
PLF1MB-C	✓		**PLF1MB-M**	✓	
			PLF1MC-M	✓	3
PLM1M-C	✓	0	**PLM1M-M**	✓	0,1,2,3,4Y,5,6,7,8,10,69
PLM2M-C	✓		**PLM2M-M**	✓	0,4Y,6
PLM2S-C	✓	0,4Y	**PLM2S-D**	✓	0,2,3,4Y,5,6,8
PLM4S-C	✓		**PLM4S-D**	✓	0,2,4Y,6

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PAN-TY® Cable Ties (continued)

Standard Packaging			Bulk Packaging		
Part Number	Natural Nylon 6.6	Color/Material Suffix	Part Number	Natural Nylon 6.6	Color/Material Suffix
PL2M2S-L	✓	0	PL2M2S-D	✓	0,4Y,10
PL3M2S-L	✓		PL3M2S-D	✓	0,4Y
PLP1.5I-C	✓		PLP1.5I-M	✓	0,30
			PLP1S-M	✓	0,30
			PLP1.5S-M	✓	
PLP2S-C	✓		PLP2S-M	✓	0,30
PLT.6SM-C	✓	0	PLT.6SM-M	✓	0,30
PLT.7M-C	✓		PLT.7M-M	✓	0,30
PLT1M-C	✓	0,00,1,2,3,4Y,5,6,7,8,10,14,30, 76,702Y	PLT1M-M	✓	0,00,1,2,3,4Y,5,6,7,8,10,14,20,30,53,54,55, 59,60,69,76,100,109,120,300,702Y
			PLT1M-XMR	✓	0,1,2,3,4Y,5,6,7,8,10,30
PLT1.5M-C	✓	0	PLT1.5M-M	✓	0,00,1,2,3,4Y,5,6,7,8,10,14,20,30
			PLT1.5M-XMR	✓	0,00,30
PLT2M-C	✓	0	PLT2M-M	✓	0,1,2,3,4Y,5,6,7,8,10,20,30,69
PLT1.5I-C	✓	0,1,2,3,4Y,5,6,7,8,10,20,30	PLT1.5I-M	✓	0,00,1,2,3,4Y,5,6,7,8,10,20,30,69,100,109, 120,300
PLT2I-C	✓	0,14,30,76	PLT2I-M	✓	0,1,2,3,4Y,5,6,7,8,10,14,20,30,53,54,55,59, 69,76,300
PLT2.5I-C	✓	0	PLT2.5I-M	✓	0,20
PLT3I-C	✓	0,14	PLT3I-M	✓	0,2,3,4Y,5,6,8,10,14,20,30
PLT4I-C	✓	0,14	PLT4I-M	✓	0,2,5,6,14,20,30
PLT1S-C	✓	0	PLT1S-M	✓	0,30,38,300
PLT1.5S-C	✓	0	PLT1.5S-M	✓	0,30
PLT2S-C	✓	0,00,1,2,3,4Y,5,6,7,8,10,20,30, 76,702Y	PLT2S-M	✓	0,00,1,2,3,4Y,5,6,7,8,10,20,30,38,39,53,54, 55,59,60,69,71,76,100,109,120,300,702Y
			PLT2S-VMR	✓	0,30
PLT2.5S-C	✓	0	PLT2.5S-M	✓	0,30
PLT3S-C	✓	0,00,2,20,30,76,702Y	PLT3S-M	✓	0,00,1,2,3,4Y,5,6,7,8,10,20,30,53,54,55, 59,76,100,109,702Y
PLT4S-C	✓	0,00,2,3,4Y,5,6,8,10,20,30,76	PLT4S-M	✓	0,00,1,2,3,4Y,5,6,7,8,10,14,20,30,69,76, 100,109,120,300
PLT4.5S-C	✓	0	PLT4.5S-M	✓	0
PLT5S-C	✓	0	PLT5S-M	✓	0,2,3,4Y,5,6,8,30
PLT6LH-L	✓	0	PLT6LH-C	✓	0
PLT7LH-L	✓	0	PLT7LH-C	✓	0,30
PLT8LH-L	✓	0	PLT8LH-C	✓	0,120
PLT8LH-Q		0			
PLT9LH-L	✓	0	PLT9LH-C	✓	0,30
PLT10LH-L	✓		PLT10LH-C	✓	
PLT2H-L	✓	0	PLT2H-TL	✓	0,2,4Y,6,30,100,109,300
PLT2.5H-L	✓	0	PLT2.5H-TL	✓	0
PLT3H-L	✓	0,76	PLT3H-TL	✓	0,30,76,100,109
PLT4H-L	✓	0,00,76	PLT4H-TL	✓	0,00,1,2,3,4Y,5,6,10,20,30,69,76,100,109, 120,300
PLT4H-C	✓	0			
PLT5H-L	✓	0	PLT5H-C	✓	0,30
PLT6H-L	✓	0	PLT6H-C	✓	0,30
PLT8H-L		0	PLT8H-C	✓	0,00,30
PLT8H-L	✓	0			
PLT13H-Q	✓	0	PLT13H-C	✓	0,3

List continues on page F3.14

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PAN-TY® Cable Ties (continued)

Standard Packaging			Bulk Packaging		
Part Number	Natural Nylon 6.6	Color/Material Suffix	Part Number	Natural Nylon 6.6	Color/Material Suffix
PLT2EH-Q		0	PLT2EH-C	✓	0
			PLT3EH-NB-C		0
PLT5EH-Q	✓	0	PLT5EH-C	✓	0
			PLT5EH-NB-C		0
PLT6EH-Q	✓	0	PLT6EH-C	✓	0
			PLT6EH-NB-C		0
PLT8EH-Q		0	PLT8EH-C	✓	0
PLT10EH-Q		0	PLT10EH-C	✓	0
PLT12EH-Q		0	PLT12EH-C	✓	0
			PLUP40S-D		30
			PLUP40SE-D	✓	30
PLWP1M-C	✓		PLWP1M-D	✓	0,30
PLWP1.5I-C	✓		PLWP1.5I-D	✓	30
PLWP1S-C	✓	0	PLWP1S-D	✓	0,20,30
			PLWP1SA-D	✓	
			PLWP1SB-D	✓	
			PLWP1.5S-D	✓	30
			PLWP1.5SA-D	✓	
PLWP2S-C	✓	0	PLWP2S-D	✓	0,30
			PLWP2SA-D	✓	
			PLWP2SB-D	✓	
			PLWP2H-TL	✓	0,30
			PLWP3H-TL	✓	0
			PLWP30SC-D		30
			PLWP40SC-D		30
			PLWP40SD-D		30
			PLWP50SC-D		30
			PLWP50SE-D		30
			PRLWP30S-D		30
			PRLWP50S-D		30
PRT1S-C	✓	0	PRT1S-M	✓	0
PRT1.5S-C	✓	0	PRT1.5S-M	✓	0,30
PRT2S-C	✓	0	PRT2S-M	✓	0,2,3,4Y,6,7
PRT3S-C	✓	0	PRT3S-M	✓	0
PRT4S-C	✓	0	PRT4S-M	✓	0,2,3,4Y,6
PRT2H-L	✓	0	PRT2H-TL	✓	0
PRT3H-L	✓	0	PRT3H-TL	✓	0
PRT4H-L	✓	0	PRT4H-TL	✓	0
PRT2EH-Q		0	PRT2EH-C	✓	0,100
PRT5EH-Q	✓	0	PRT5EH-C	✓	0,100
PRT6EH-Q	✓	0	PRT6EH-C	✓	0,100
PRT8EH-Q		0	PRT8EH-C	✓	0,100
PRT10EH-Q		0	PRT10EH-C	✓	0
PRT12EH-Q		0	PRT12EH-C	✓	0
PRWP1S-C	✓		PRWP1S-D	✓	0
			PRWP1SA-D	✓	
			PRWP1SB-D	✓	
			PRWP1.5S-D	✓	0,20,30
			PRWP2S-D	✓	0
			PRWP2H-TL	✓	

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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NEW! SUPER-GRIP® Cable Ties – Nylon 6.6

- Tie designed to grip the bundle when tightly applied to resist lateral movement
- High strength allows the tie to withstand rough installation practices that occur in MRO and construction environments such as securing cables to vertical and horizontal ladder cable tray systems
- Thin, wide strap body provides flexibility enabling it to conform to bundle while maintaining tensile strength
- Curved tip is easy to pick up from flat surfaces and allows faster initial threading to speed installation
- Complementary mounts shown on pages F3.29 to F3.30



Part Number	Length In.	Length mm	Width In.	Width mm	Max. Bundle Dia. In.	Max. Bundle Dia. mm	Min. Loop Tensile Str. Lbs.	Min. Loop Tensile Str. N	Recommended Installation Tool	Std. Pkg. Qty.	Std. Ctn. Qty.
Miniature Cross Section											
SG100M-C	4.2	106	.118	3.0	1.00	25	18	80	GTS, GTSL, GS2B, PTS, PPTS, STS2	100	1000
Intermediate Cross Section											
SG150I-C	6.2	157	.168	4.3	1.50	38	40	178	GTS, GTSL, GS2B, PTS, PPTS, STS2	100	1000
Standard Cross Section											
SG200S-C	8.3	211	.225	5.7	2.00	51	50	222	GTS, GTSL, GS2B, GTH, GS4H, PTS, PTH, PPTS, STS2, STH2	100	1000
SG250S-C	10.4	264	.225	5.7	2.60	66	70	311		100	1000
SG300S-C	12.4	315	.225	5.7	3.20	81	70	311		100	1000
SG370S-C	15.3	389	.225	5.7	4.20	107	70	311		100	1000
Light-Heavy Cross Section											
SG350LH-L	15.3	389	.330	8.4	4.13	105	120	534	GTH, GS4H, GS4EH, PTH, STH2, ST3EH	50	500
Heavy Cross Section											
SG450H-L	18.6	471	.380	9.7	5.20	132	175	778	GTH, GS4H, GS4EH, PTH, STH2, ST3EH	50	500

Note: UL Recognized and CSA Certified except SG100M, SG150I, SG370S and SG450H.

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Part Number System for *SUPER-GRIP*® Cable Ties

SG	200	S	—	C	
Type	**Size**	**Cross Section**		**Package Size**	**Color/Material**
SG = Locking Tie	Approx. Length (mm)	M = Miniature I = Intermediate S = Standard LH = Light-Heavy H = Heavy		L = 50 C = 100 TL = 250 M = 1000	See chart below for colors and materials available

Material and Color Chart

Material	Color	*PANDUIT* Suffix
Nylon 6.6	Natural	✓
Weather Resistant Nylon 6.6	Black	0
Heat Stabilized Nylon 6.6	Black	30

✓Denotes *PANDUIT* Natural Nylon 6.6 (no suffix required).

Part Number Availability List

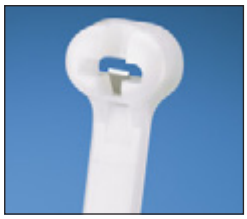
Standard Packaging			Bulk Packaging		
Part Number	**Natural Nylon 6.6**	**Color/Material Suffix**	**Part Number**	**Natural Nylon 6.6**	**Color/Material Suffix**
SG100M-C	✓	0	**SG100M-M**	✓	0
SG150I-C	✓	0	**SG150I-M**	✓	0
SG200S-C	✓	0	**SG200S-M**	✓	0,30
SG250S-C	✓	0			
SG300S-C	✓	0	**SG300S-M**	✓	0,30
SG370S-C	✓	0	**SG370S-M**	✓	0
SG350LH-L	✓	0	**SG350LH-TL**	✓	0,30
SG450H-L	✓	0	**SG450H-C**	✓	0

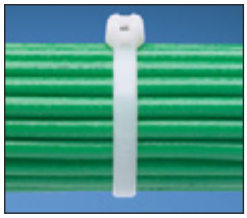
Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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DOME-TOP® Barb Ty Cable Ties – Nylon 6.6

- Dome-top head features unique patented design with round, smooth edges
- Stainless steel locking barb provides consistent performance, reliability, and infinite adjustability through entire bundle range
- High strength and low thread force
- A variety of materials and colors are available for specific applications
- Curved tip is easy to pick up from flat surfaces and allows faster initial threading to speed installation





Part Number	Length In.	Length mm	Width In.	Width mm	Max. Bundle Dia. In.	Max. Bundle Dia. mm	Min. Loop Tensile Str. Lbs.	Min. Loop Tensile Str. N	Recommended Installation Tool	Std. Pkg. Qty.	Std. Ctn. Qty.
Miniature Cross Section											
BT1M-C	4.0	102	.095	2.4	.90	23	18	80	GTS, GTSL, GS2B, PTS, PPTS, STS2	100	1000
BT1.5M-C	6.3	160	.095	2.4	1.50	38	18	80		100	1000
BT2M-C	7.9	201	.095	2.4	2.00	51	18	80		100	1000
BT4M-C	14.2	361	.095	2.4	4.00	102	18	80		100	1000
Intermediate Cross Section											
BT1.5I-C	6.1	155	.141	3.6	1.50	38	40	178	GTS, GTSL, GS2B, PTS, PPTS, STS2	100	1000
BT2I-C	8.0	203	.141	3.6	2.00	51	40	178		100	1000
BT3I-C	11.3	287	.141	3.6	3.00	76	40	178		100	1000
BT4I-C	14.3	363	.141	3.6	4.00	102	40	178		100	1000
Standard Cross Section											
BT2S-C	8.0	203	.185	4.7	2.00	51	50	222	GTS, GTSL, GS2B, GTH, GS4H, PTS, PTH, PPTS, STS2, STH2	100	1000
BT3S-C	12.0	305	.185	4.7	3.00	76	50	222		100	1000
BT4S-C	15.1	384	.185	4.7	4.00	102	50	222		100	1000
Light-Heavy Cross Section (Straight Tip)											
BT2LH-L	8.7	221	.275	7.0	2.00	51	120	534	GTH, GS4H, GS4EH, PTH, STH2, ST3EH	50	500
BT3LH-L	11.8	300	.275	7.0	3.00	76	120	534		50	500
BT4LH-L	14.9	378	.275	7.0	4.00	102	120	534		50	500
BT5LH-L	18.1	460	.275	7.0	5.00	127	120	534		50	500
BT6LH-L	21.2	538	.275	7.0	6.00	152	120	534		50	500
BT7LH-L	24.4	620	.275	7.0	7.00	178	120	534		50	500
BT8LH-L	27.5	699	.275	7.0	8.00	203	120	534		50	500
BT9LH-L	30.7	780	.275	7.0	9.00	229	120	534		50	500

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DOME-TOP® Barb Ty Clamp Ties – Nylon 6.6

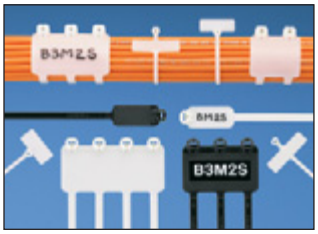


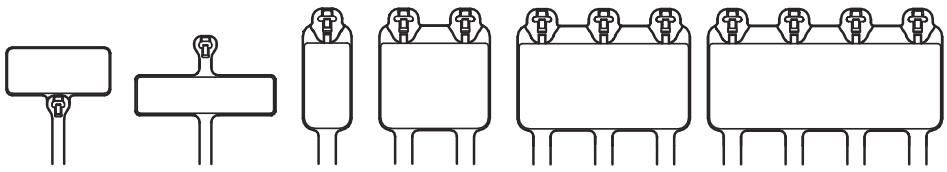
- Used to secure a cable bundle to another surface such as a control panel, communication rack, wall or ceiling
- Design allows for bundling before or after screwing clamp in place
- Stainless steel locking barb provides consistent performance, reliability, and infinite adjustability through entire bundle range
- Curved tip is easy to pick up from flat surfaces and allows faster initial threading to speed installation

Part Number	Length In.	Length mm	Width In.	Width mm	Max. Bundle Dia. In.	Max. Bundle Dia. mm	Min. Loop Tensile Str. Lbs.	Min. Loop Tensile Str. N	Screw Size	Screw Size Metric	Recommended Installation Tool	Std. Pkg. Qty.	Std. Ctn. Qty.
Miniature Cross Section													
BC1M-S4-M	4.6	117	.095	2.4	.90	23	18	80	#4	M2.5	GTS, GTSL, GS2B, PTS, PPTS, STS2	1000	50000
BC2M-S4-M	8.3	211	.095	2.4	2.00	51	18	80	#4	M2.5		1000	25000
Intermediate Cross Section													
BC1.5I-S8-M	6.6	168	.141	3.6	1.50	38	40	178	#8	M4	GTS, GTSL, GS2B, PTS, PPTS, STS2	1000	25000
Standard Cross Section													
BC2S-S10-D	8.5	216	.185	4.7	2.00	51	50	222	#10	M5	GTS, GTSL, GS2B, GTH, GS4H, PTS, PTH, PPTS, STS2, STH2	500	10000
BC3S-S10-D	12.5	318	.185	4.7	3.00	76	50	222	#10	M5		500	5000
BC4S-S10-C	15.6	396	.185	4.7	4.00	102	50	222	#10	M5		100	1000
Light-Heavy Cross Section (Straight Tip)													
BC4LH-S25-L	15.5	394	.275	7.0	4.00	102	120	534	1/4	M6	GTH, GS4H, GS4EH, PTH, STH2, ST3EH	50	500

DOME-TOP® Barb Ty Marker and Flag Ties – Nylon 6.6

- Used to fasten and identify bundles at the same time
- Stainless steel locking barb provides consistent performance, reliability, and infinite adjustability through entire bundle range
- Can be marked with *PANDUIT* marker pens or custom imprinted using *PANDUIT* Custom Hot Stamping Service, see page F3.11
- Curved tip is easy to pick up from flat surfaces and allows faster initial threading to speed installation





Part Number	Marker Type	Length In.	Length mm	Width In.	Width mm	Marker Write-On Area In.	Marker Write-On Area mm	Max. Bundle Dia. In.	Max. Bundle Dia. mm	Min. Loop Tensile Str. Lbs.	Min. Loop Tensile Str. N	Recommended Installation Tool	Std. Pkg. Qty.	Std. Ctn. Qty.
Miniature Cross Section														
BF1M-C	Flag	4.6	117	.095	2.4	.36 x .81	9.1 x 20.6	.90	23	18	80	GTS, GTSL, GS2B, PTS, PPTS, STS2	100	1000
BF2M-C	Flag	8.3	211	.095	2.4	.36 x .81	9.1 x 20.6	2.00	51	18	80		100	1000
BM1M-C	Wrap	4.2	107	.095	2.4	.29 x 1.09	7.4 x 27.7	.90	23	18	80		100	1000
BM2M-C	Wrap	7.9	201	.095	2.4	.29 x 1.09	7.4 x 27.7	2.00	51	18	80		100	1000
Standard Cross Section														
BM2S-C	Wrap	8.0	203	.185	4.7	.49 x .91	12.4 x 23.1	2.00	51	50	222	GTS, GTSL, GS2B, GTH, GS4H, PTS, PTH, PPTS, STS2, STH2	100	1000
BM4S-C	Wrap	15.1	384	.185	4.7	.50 x 2.13	12.7 x 54.1	4.00	102	50	222		100	1000
B2M2S-D	Wrap	8.0	203	.185	4.7	1.15 x .91	29.2 x 23.1	2.00	51	50	222		500	2500
B3M2S-TL	Wrap	8.0	203	.185	4.7	1.81 x .91	46.0 x 23.1	2.00	51	50	222		250	2500
B4M2S-TL	Wrap	8.0	203	.185	4.7	2.47 x .91	62.7 x 23.1	2.00	51	50	222		250	2500

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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CE DURA-TY™ Cable Ties – Weather Resistant Acetal

- Excellent solution for outdoor applications requiring strength and durability
- Ideal for securing cables in outdoor messenger strand applications and vertical ladder racks
- Excellent ultraviolet light, chemical, and moisture resistance
- Double stainless steel locking barbs
- High tensile strength and high impact resistance
- Meets Telcordia TR-TSY-000789
- May be used with stackable aerial cable spacer (SACS50-T100) shown below



Part Number	Length		Width		Max. Bundle Dia.		Min. Loop Tensile Str.		Recommended Installation Tool	Std. Pkg. Qty.	Std. Ctn. Qty.
	In.	mm	In.	mm	In.	mm	Lbs.	N			
DT4EH-L0	13.5	343	.500	12.7	3.88	98	250	1112	GTH, GS4EH, ST3EH	50	1000
DT8EH-Q0	27.0	686	.500	12.7	8.00	203	250	1112		25	500
DT14EH-L0	48.0	1219	.500	12.7	14.00	355	250	1112		50	250
DT15EH-L0	53.0	1346	.500	12.7	15.00	381	250	1112		50	250
DT28EH-C0	96.0	2438	.500	12.7	28.00	711	250	1112		100	—
DT44EH-C0	144.0	3658	.500	12.7	44.00	1117	250	1112		100	—



Part Number	Description	Length		Width		Min. Loop Tensile Str.		Recommended Installation Tool	Std. Pkg. Qty.	Std. Ctn. Qty.
		Ft.	m	In.	mm	Lbs.	N			
Strapping, Heads, and Kit – Allows User to Customize Strap Length										
DTREH-LR0	50' reel of strapping.	50.0	15	.500	12.7	250	1112	GTH, GS4EH, ST3EH	1	20
DTHEH-Q0	Bag of 25 cable tie heads.	—	—	—	—	—	—	—	25	500
DTKEH-0	Kit containing 50' reel of strapping and 25 cable tie heads.	50.0	15	.500	12.7	250	1112	GTH, GS4EH, ST3EH	1	20

Stackable Aerial Cable Spacer – Weather Resistant Polypropylene





- Each spacer snaps into another to increase spacer heights by 1/2" increments
- Designed for use in parallel or perpendicular applications
- Greater resistance to damage caused by ultraviolet light – indoor or outdoor use
- For use with DURA-TY™ Cable Ties shown above or PAN-STEEL® Metal Locking Ties, see page F3.36

Part Number	Length		Width		Height		Bulk Pkg. Qty.	Bulk Ctn. Qty.
	In.	mm	In.	mm	In.	mm		
SACS50-T100	2.08	52.8	1.16	29.5	.71	18.0	200	2000

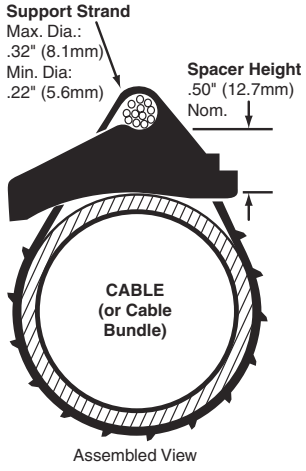
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Aerial Support Tie – Weather Resistant Polypropylene



- Designed to attach coax or telephone cable to the support strand, 1/4" (6.4mm) or 5/16" (7.9mm), to form the expansion loop and keep equipment and cables clear of pole hardware
- One-piece construction with integral 1/2" (12.7mm) spacer reduces inventory costs of separate spacer and bands, and installs faster to lower the installed cost
- Releasable and reusable

Part Number	Length		Width		Thickness		Max. Bundle Dia.		Min. Loop Tensile Str.		Recommended Installation Tool	Std. Pkg. Qty.	Std. Ctn. Qty.
	In.	mm	In.	mm	In.	mm	In.	mm	Lbs.	N			
AST10-5-C100	5.6	142	.448	11.4	.055	1.4	1.00	25	75	334	Hand Installed Only	100	1000
AST15-5-C100	6.9	175	.448	11.4	.055	1.4	1.50	38	75	334		100	1000
AST20-5-C100	8.4	214	.448	11.4	.055	1.4	2.00	51	75	334		100	1000
AST25-5-C100	10.0	254	.448	11.4	.055	1.4	2.50	64	75	334		100	1000



Assembled View

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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Part Number System for *DOME-TOP*® Barb Ty and *DURA-TY*™ Cable Ties

BT	2	S		—	C	
Type	**Size**	**Cross Section**	**Screw Hole Size**		**Package Size**	**Color/Material**
BT = Locking Tie BC = Clamp Tie BF = Flag Tie BM = Marker Tie BP = Push Mount Tie BW = Wing Push Mount Tie DT = Locking Tie	Approx. Maximum Bundle Dia. (In.)	M = Miniature I = Intermediate S = Standard LH = Light-Heavy EH = Extra-Heavy	(Clamp Ties Only) -S4 = #4 (M2.5) -S6 = #6 (M3) -S8 = #8 (M4) -S10 = #10 (M5) -S25 = 1/4 (M6)		Q = 25 L = 50 C = 100 TL = 250 D = 500 M = 1000 LR= 50' Reel	See chart below for colors and materials available

Material and Color Chart

Material	Color	*PANDUIT* Suffix
Nylon 6.6	Natural	✓
Weather Resistant Nylon 6.6	Black	0
Nylon 6.6	Brown	1
Nylon 6.6	Red	2
Nylon 6.6	Orange	3
Nylon 6.6	Yellow	4Y
Nylon 6.6	Green	5
Nylon 6.6	Blue	6

Material	Color	*PANDUIT* Suffix
Nylon 6.6	Purple	7
Nylon 6.6	Gray	8
Nylon 6.6	White	10
Nylon 6.6	Telephone Gray	14
Nylon 6.6	Black	20
Heat Stabilized Nylon 6.6	Black	30
Heat Stabilized Nylon 6.6	Natural	39
Weather Resistant Acetal	Black	*
Weather Resistant Polypropylene	Black	100

✓Denotes *PANDUIT* Natural Nylon 6.6 (no suffix required).
*Denotes *DURA-TY*™ Weather Resistant Acetal material (no suffix required).

Part Number Availability List

Standard Packaging			Bulk Packaging		
Part Number	Natural Nylon 6.6	Color/Material Suffix	Part Number	Natural Nylon 6.6	Color/Material Suffix
			AST10-5-C100		100
			AST15-5-C100		100
			AST20-5-C100		100
			AST25-5-C100		100
			BC1M-S4-M	✓	0
			BC2M-S4-M	✓	0
			BC1.5I-S8-M	✓	0
BC2S-S10-C	✓	0	BC2S-S10-D	✓	0
			BC3S-S10-D	✓	0
BC4S-S10-C	✓	0	BC4S-S10-D	✓	0,30
BC4LH-S25-L	✓	0	BC4LH-S25-TL	✓	0
BF1M-C	✓		BF1M-M	✓	0
BF2M-C	✓		BF2M-M	✓	0
BM1M-C	✓		BM1M-M	✓	0
BM2M-C	✓		BM2M-M	✓	0
BM2S-C	✓		BM2S-D	✓	0
BM4S-C	✓		BM4S-D	✓	0
			BP2S-D		0
BT1M-C	✓	0,30	BT1M-M	✓	0,1,2,3,4Y,5,6,7,8,10,30,39
BT1.5M-C	✓	0	BT1.5M-M	✓	0, 30
BT2M-C	✓	0	BT2M-M	✓	0,2,3,4Y,5,6,8,30
BT4M-C	✓	0	BT4M-M	✓	0
BT1.5I-C	✓	0	BT1.5I-M	✓	0,1,2,3,4Y,5,6,7,8,10,30,39

List continues on page F3.22

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DOME-TOP® Barb Ty and DURA-TY™ Cable Ties (continued)

Standard Packaging			Bulk Packaging		
Part Number	Natural Nylon 6.6	Color/Material Suffix	Part Number	Natural Nylon 6.6	Color/Material Suffix
BT2I-C	✓	0	**BT2I-M**	✓	0,30
BT3I-C	✓	0	**BT3I-M**	✓	0,14,30
BT4I-C	✓	0	**BT4I-M**	✓	0,14
BT2S-C	✓	0	**BT2S-M**	✓	0,1,2,3,4Y,5,6,7,8,10,20,30,39
BT3S-C	✓	0,2	**BT3S-M**	✓	0, 30, 39
BT4S-C	✓	0	**BT4S-M**	✓	0,2,3,4Y,5,6,7,8,10,30,39
BT2LH-L	✓	0	**BT2LH-TL**	✓	0
BT3LH-L	✓	0	**BT3LH-TL**	✓	0
BT4LH-L	✓	0	**BT4LH-TL**	✓	0,30,39
BT5LH-L	✓	0	**BT5LH-C**	✓	0
BT6LH-L	✓	0	**BT6LH-C**	✓	0
BT7LH-L	✓	0	**BT7LH-C**	✓	0
BT8LH-L	✓	0	**BT8LH-C**	✓	0
BT9LH-L	✓	0	**BT9LH-C**	✓	0
			BW1.5I-D	✓	
			BW2S-D	✓	0
			B2M2S-D	✓	0
			B3M2S-TL	✓	0
			B4M2S-TL	✓	0

DURA-TY™ Weather Resistant Acetal Strap Body and Head

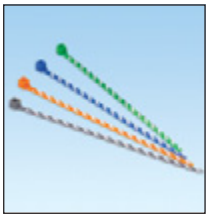
DTHEH-Q0		*			
DTKEH-0		*			
DTREH-LR0		*			
DT4EH-L0		*			
DT8EH-Q0		*			
DT14EH-L0		*	**DT14EH-C0**		*
DT15EH-L0		*			
DT28EH-C0		*			
DT44EH-C0		*			

*Denotes DURA-TY™ Weather Resistant Acetal material (no suffix required).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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PAN-TY® Striped Cable Ties – Nylon 6.6

- Nylon material for indoor use
- Striped PAN-TY® Cable Ties in 25 color combinations match the universally accepted even-count color code
- Solid color ties are available for identification of "Super Groups" in cable containing more than 600 pairs
- Each fifty-piece package fits in the PAN-POUCH™ Kit or pocket pouch, see page F3.24
- Install by hand or use *PANDUIT* tools (GTS, GTSL, GS2B, PTS, PPTS or STS2)





Part Number	Color	Length		Width		Max. Bundle Dia.		Min. Loop Tensile Str.		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm	Lbs.	N		
PLT1M-L6-10	Blue/White Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L3-10	Orange/White Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L5-10	Green/White Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L1-10	Brown/White Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L8-10	Slate/White Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L6-2	Blue/Red Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L3-2	Orange/Red Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L5-2	Green/Red Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L1-2	Brown/Red Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L8-2	Slate/Red Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L6-0	Blue/Black Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L3-0	Orange/Black Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L5-0	Green/Black Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L1-0	Brown/Black Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L8-0	Slate/Black Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L6-4	Blue/Yellow Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L3-4	Orange/Yellow Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L5-4	Green/Yellow Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L1-4	Brown/Yellow Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L8-4	Slate/Yellow Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L6-7	Blue/Violet Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L3-7	Orange/Violet Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L5-7	Green/Violet Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L1-7	Brown/Violet Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L8-7	Slate/Violet Stripe	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L0	Black	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L1	Brown	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L2	Red	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L3	Orange	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L4Y	Yellow	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L5	Green	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L6	Blue	4.0	102	.100	2.5	.82	21	18	80	50	1000
PLT1M-L8	Slate	4.0	102	.100	2.5	.82	21	18	80	50	1000

Note: CSA Certified on solid colors only.

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Telephone Cable Identification Kits



PPC25X50F



PP5X50F

- *PAN-POUCH™* Kit is made of 2-ply laminated black nylon/vinyl and folds for easy storage
- Easily hang pouch from cable by using hook and loop fasteners
- Pocket pouch holds five (50 pc.) packages and is made of a white vinyl

Part Number	Description	Dimensions		Std. Pkg. Qty.
		Open	Closed	
PPC25X50F	Pouch filled with 1,250 cable ties (50 each of all 24 striped ties, and 50 solid red ties)	10.5" x 38" (267mm x 965mm)	10.5" x 6" (267mm x 152mm)	1
PPC25X50	Empty pouch	10.5" x 38" (267mm x 965mm)	10.5" x 6" (267mm x 152mm)	1
PP5X50F	Pocket pouch filled with 250 cable ties (50 of each color: Blue, Orange, Green, Brown and Slate – all with White stripe)	—	3.5" x 5.25" (89mm x 133mm)	1

Cable Tie Tools – Tool Controlled Tension and Cut-Off



- A full line of ergonomic cable tie installation tools that lead the industry in reliability and performance
- Tool controlled tension provides flush cut-off and speeds installation to lower installed cost
- Lightweight and balanced
- Easy to change tension adjustment and easy to operate
- A combination of design, operation, and construction features, provides a long service life
- Replacement blades available
- No special maintenance required



GTS



GTH

Part Number	Used With Cable Ties	Weight		Part Features	Standards	Std. Pkg. Qty.
		oz.	g			
GTS	SM, M, I, S	9.8	278	Ergonomic design with impact resistant resin housing, narrow nose, and cushion handle.	QPL per Mil Std MS90387-1 and Mil Spec MIL-T-81306A	1
GTH	S, HS, LH, H	12.0	340	Ergonomic design with impact resistant resin housing, narrow nose, and cushion handle.	—	1

Cable Tie Cross Sections: SM = Subminiature, M = Miniature, I = Intermediate, S = Standard, HS = Heavy-Standard, LH = Light-Heavy, H = Heavy

NEW! Cable Tie Tools – Installer Controlled Tension and Cut-Off

- Economical series of tools for maintenance or construction applications
- Excellent tools for low volume applications



Part Number	Used With Cable Ties	Weight		Part Features	Std. Pkg. Qty.
		oz.	g		
ST3EH	LH, H, EH	9.0	256	Durable, all steel construction with comfortable plastic handles. Blue color.	1

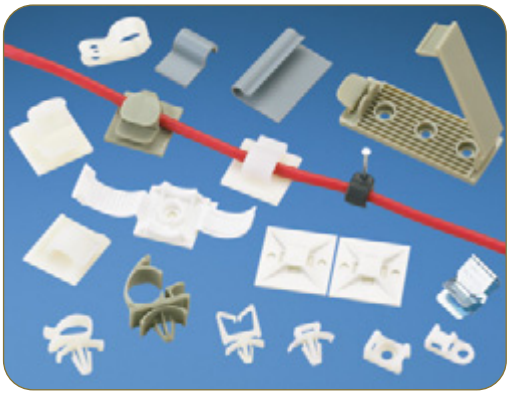
Cable Tie Cross Sections: LH = Light-Heavy, H = Heavy, EH = Extra-Heavy

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

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CABLE ACCESSORIES

PANDUIT provides a comprehensive offering of cable accessories. These accessories help provide the lowest installed cost solution for routing and managing cable. *PANDUIT* cable accessories are designed and manufactured to meet applicable quality standards including International, UL, Military, ISO and Aerospace.



- **Largest selection of mounts, clips, and clamps for cable management**
- **Installation methods include adhesive backed, user applied adhesive, screws, rivets or push barb**
- ***PANDUIT* cable tie mounts and cable ties provide a simple and complete solution for routing cables and tubing**
- **Adhesive backed mounts provide a strong adhesive bond for long term reliability**
- **Cable clips offer a one-piece solution to save time and reduce inventory**

PANDUIT mounts, clips, and clamps are manufactured in an environment committed to design innovation, high quality, and knowledgeable service to our customers.

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TAK-TY® Hook & Loop Cable Tie Mounts

- For use with TAK-TY® Hook & Loop Cable Ties
- Unique cradle design provides maximum stability for cable bundle
- Dimensions are 1.10"L x 1.10"W x .34"H (27.9mm x 27.9mm x 8.6mm)
- For indoor use only



Part Number	Material	Color	Mounting Method	Max. Static Load		Std. Pkg. Qty.	Std. Ctn. Qty.
				Lbs.	g		
ABMT-A-C	Nylon 6.6	Natural	Rubber Adhesive	.38	174	100	1000
ABMT-A-C20		Black		.38	174	100	1000
ABMT-S6-C	Nylon 6.6	Natural	#6 (M3) Screw	—	—	100	1000
ABMT-S6-C20		Black		—	—	100	1000
ABMT-S6-C60*	Flame Retardant Nylon 6.6	Black		—	—	100	1000
ABMT-S6-C69*		Natural		—	—	100	1000

*Flame retardant products are manufactured from a material that is rated UL 94V-0.

4-Way Adhesive Backed Cable Tie Mounts



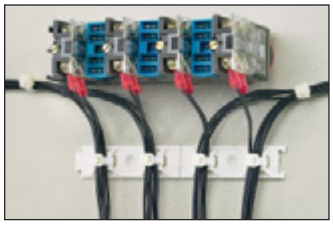
- Allow cable tie entry from all four sides
- Available in multiple sizes to match application load requirements
- Produced 2-up, 4-up, or with tear tabs for fast and easy liner removal to speed installation
- Rubber-based adhesive provides a strong and reliable bond
- For indoor use only

Part Number	Used With Cable Ties‡	Length		Width		Material	Color	Max. Static Load		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm			Lbs.	g		
ABM1M-A-C	M	.50	12.7	.50	12.7	Nylon 6.6	White	.13	59	100	500
ABMM-A-C	M, I	.75	19.1	.75	19.1	ABS	White	.30	136	100	500
ABMM-A-C20	M, I	.75	19.1	.75	19.1		Black	.30	136	100	500
ABM2S-A-C	M, I, S	1.00	25.4	1.00	25.4		White	.50	227	100	500
ABM2S-A-C14	M, I, S	1.00	25.4	1.00	25.4		Gray	.50	227	100	500
ABM2S-A-C15	M, I, S	1.00	25.4	1.00	25.4		Ivory	.50	227	100	500
ABM2S-A-C0	M, I, S,	1.00	25.4	1.00	25.4	Weather Resistant ABS	Black	.50	227	100	500
ABM100-A-C	M, I, S	1.00	25.4	1.00	25.4	Nylon 6.6	White	.50	227	100	1000
ABM100-A-C15	M, I, S	1.00	25.4	1.00	25.4		Ivory	.50	227	100	1000
ABM100-A-D20	M, I, S,	1.00	25.4	1.00	25.4		Black	.50	227	500	5000
ABM112-A-C	M, I, S	1.12	28.6	1.12	28.6		White	.63	286	100	500
ABM112-A-D20	M, I, S	1.12	28.6	1.12	28.6		Black	.63	286	500	5000
ABM3H-A-L	M, I, S, HS, LH, H and HLM	1.50	38.1	1.50	38.1		White	1.13	513	50	500
ABM3H-A-L20		1.50	38.1	1.50	38.1		Black	1.13	513	50	500
ABM4H-A-L		2.00	50.8	2.00	50.8		White	2.00	907	50	500

‡Cable tie cross section sizes: M = Miniature, I = Intermediate, S = Standard, HS = Heavy-Standard, LH = Light-Heavy, H = Heavy, HLM = Miniature TAK-TY® Hook & Loop Cable Ties.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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ABMQ Multiple Bridge Mount



- Multiple cable tie bridges on one mount speeds installation of cable bundles by reducing the number of mounts applied
- The Dovetail connection system provides alignment and a joining method to expand routing capabilities
- The V-groove allows for easy separation into two mounts with two bridges each for separate applications
- 4-way cable tie bridges allow cable bundles to be secured perpendicular to the mount for even spacing or inline to secure a bundle in multiple places
- The large adhesive surface area provides long-term reliability and keeps product in place despite heavy load or high stress

Part Number	Used With Cable Ties	Length		Width		Height		Material	Color	Environment	Mounting Method	Max. Static Load		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm					Lbs.	g		
ABMQS-A-C	M, I, S	5.13	130.3	.75	19.0	.25	6.4	ABS	White	Indoors	Adhesive Backed	1.85	838	25	250
ABMQS-A-Q20	M, I, S	5.13	130.3	.75	19.0	.25	6.4	ABS	Black	Indoors	Adhesive Backed	1.85	838	25	250
ABMQS-S6-C	M, I, S	5.13	130.3	.75	19.0	.25	6.4	ABS	White	Indoors/High Temp	User Supplied Adhesive and/or two #6 (M3) Screw	—	—	100	1000
ABMQS-S6-C0	M, I, S	5.13	130.3	.75	19.0	.25	6.4	Weather Resistant ABS	Black	Outdoors/ High Temp	Two #6 (M3) screw or user supplied adhesive	—	—	100	1000

Tie Mounts – Mechanically Applied



- Unique cradle design provides maximum stability for cable bundle
- For indoor use only
- Material: Nylon 6.6

Part Number	Used With Cable Ties‡	Length		Width		Height		Color	Mounting Method	Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm				
TM1S4-C	M	.51	13.0	.32	8.0	.23	5.8	Natural	#4 (M2.5) Screw	100	500
TM1S4-C0	M	.51	13.0	.32	8.0	.23	5.8	Black	#4 (M2.5) Screw	100	500
TM1S6-C	M	.75	13.0	.38	9.5	.23	5.8	Natural	#6 (M3) Screw	100	500
TM1S6-C0	M	.51	13.0	.32	8.0	.23	5.8	Black		100	500
TM2S6-C	M, I, S	.63	16.1	.43	10.8	.28	7.0	Natural		100	500
TM2S6-C0	M, I, S	.63	16.1	.43	10.8	.28	7.0	Black		100	500
TM2S8-C	M, I, S	.63	16.1	.43	10.8	.28	7.0	Natural	#8 (M4) Screw	100	500
TM2S8-C0	M, I, S	.63	16.1	.43	10.8	.28	7.0	Black		100	500
TM3S8-C	M, I, S, LH	.86	21.8	.62	15.5	.38	9.5	Natural		100	500
TM3S8-C0	M, I, S, LH	.86	21.8	.62	15.5	.38	9.5	Black		100	500
TM3S10-C	M, I, S, LH	.86	21.8	.62	15.8	.38	9.5	Natural	#10 (M5) Screw	100	500
TM3S10-C0	M, I, S, LH	.86	21.8	.62	15.8	.38	9.5	Black	#10 (M5) Screw	100	500
TM3S25-C	M, I, S, LH	.86	21.8	.62	15.8	.38	9.5	Natural	1/4 (M6) Screw	100	500
TM3S25-C0	M, I, S, LH	.86	21.8	.62	15.8	.38	9.5	Black	1/4 (M6) Screw	100	500

‡Cable tie cross section sizes: M = Miniature, I = Intermediate, S = Standard, LH = Light-Heavy.

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Extra-Heavy Cable Tie Mounts

- Unique cradle design provides maximum stability for cable bundle
- Route and support large diameter and heavy cable bundles
- Dimensions are 1.65"L x .74"W x .61"H (42.0mm x 19.0mm x 15.0mm)
- For indoor/outdoor use



Part Number	Used With Cable Ties‡	Material	Mounting Method	Std. Pkg. Qty.	Std. Ctn. Qty.
TMEH-S8-Q0	M, I, S, HS, LH, H, EH, HLM, HLT	Weather Resistant Nylon 6.6	#8 (M4) Screw	25	250
TMEH-S10-Q0			#10 (M5) Screw	25	250
TMEH-S25-Q0			1/4 (M6) Screw	25	250
TMEH-S10-C100		Weather Resistant Polypropylene	#10 (M5) Screw	100	500

‡Cable tie cross section sizes: M = Miniature, I = Intermediate, S = Standard, HS = Heavy Standard, LH = Light-Heavy, H = Heavy, EH= Extra Heavy, HLM and HLT *TAK-TY®* Hook & Loop Cable Ties.
All product color is black.

NEW! *HYPER-V™* Cable Tie Mounts

- Retaining tab within window holds cable tie in position when pre-installed in the mount
- Low profile design keeps bundle close to mounting surface
- For use with *HYPER-V™* Cable Ties on page F3.7



Part Number	Used With Cable Ties‡	Length		Width		Height		Mounting Method	Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm			
HVTM-06-C0	HV	.81	21.0	.68	17.3	.41	10.4	#10 (6mm) Screw	100	500

All product color is black.
‡HV = *HYPER-V™* mounts.

NEW! *HYPER-V™* Masonry Cable Tie Mounts

- Used to secure wire, cable, or tubing to masonry surfaces
- Material: Impact Modified Weather Resistant Nylon 6.6
- For use with *HYPER-V™* Cable Ties on page F3.7



Part Number	Used With Cable Ties	Length		Width		Height		Mounting Method	Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm			
HVMPM-08-C0	HV	.54	13.7	.47	11.9	1.63	41.4	Tree Barb for .312" hole dia.	100	500

All product color is black.
‡HV = *HYPER-V™* mounts.

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NEW! SUPER-GRIP® Masonry Push Mounts



- Used to secure wire, cable, or tubing to masonry surfaces
- Material: Impact Modified Weather Resistant Nylon 6.6
- For use with SUPER-GRIP® Cable Ties on page F3.15

Part Number	Used With Cable Ties	Grip Length		Width		Height		Mounting Method	Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm			
SGMPMS19-C0	SGM, SGI, SGS	.97	24.6	.37	9.4	.25	6.4	Tree Barb	100	500
SGMPMS25-C0	SGM, SGI, SGS	.97	24.6	.40	10.2	.27	6.9	Tree Barb	100	500
SGMPMH38-L0	SGM, SGI, SGS, SGLH, SGH	1.25	31.8	.57	14.5	.30	7.5	Tree Barb	50	500
SGMPMWH32-L0	SGM, SGI, SGS, SGLH, SGH	1.41	35.8	.58	14.7	.28	7.1	Tree Barb	50	500

All product color is black.
‡Cable tie cross section sizes: SGM = SUPER-GRIP® Miniature, SGI = SUPER-GRIP® Intermediate, SGS = SUPER-GRIP® Standard, SGLH = SUPER-GRIP® Light Heavy, SGH = SUPER-GRIP® Heavy.

NEW! SUPER-GRIP® Adhesive Back Mounts



- Low profile design keeps bundle close to mounting surface
- Small overall size allows use where space is limited

Part Number	Used With Cable Ties‡	Length		Width		Material	Color	Max. Static Load		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm			Lbs.	g		
SGABM20-A-C	SGM, SGI	.75	19.1	.75	9.1	Nylon 6.6	White	127	.28	100	500
SGABM20-AT-C0	SGM, SGI	.75	19.1	.75	19.1	Weather Resistant Nylon 6.6	Black	127	.28	100	500
SGABM25-A-C	SGM, SGI, SGS	1.00	25.4	1.00	25.4	Nylon 6.6	White	227	.50	100	1000
SGABM25-AT-C0	SGM, SGI, SGS	1.00	25.4	1.00	25.4	Weather Resistant Nylon 6.6	Black	227	.50	100	1000
SGABM25-S6-C	SGM, SGI, SGS	1.00	25.4	1.00	25.4	Nylon 6.6	White	—	—	100	1000
SGABM25-S6-C0	SGM, SGI, SGS	1.12	28.6	1.12	28.6	Weather Resistant Nylon 6.6	Black	—	—	100	1000
SGABM30-A-C	SGM, SGI, SGS	1.12	28.6	.12	28.6	Nylon 6.6	White	286	.63	100	500
SGABM30-AT-C0	SGM, SGI, SGS	1.12	28.6	.12	8.6	Weather Resistant Nylon 6.6	Black	286	.63	100	500
SGABM40-A-L	SGM, SGI, SGS, SGLH, SGH	1.50	38.1	.50	38.1	Nylon 6.6	White	51.3	1.13	50	500
SGABM40-AT-L0	SGM, SGI, SGS, SGLH, SGH	1.50	38.1	.50	38.1	Weather Resistant Nylon 6.6	Black	513	1.13	50	500
SGABM50-A-L	SGM, SGI, SGS, SGLH, SGH	2.00	.8	2.00	50.8	Nylon 6.6	White	907	2.00	50	500
SGABM50-AT-L0	SGM, SGI, SGS, SGLH, SGH	2.00	50.8	2.00	50.8	Weather Resistant Nylon 6.6	Black	907	2.00	50	500

‡Cable tie cross section sizes: SGM = SUPER-GRIP® Miniature, SGI = SUPER-GRIP® Intermediate, SGS = SUPER-GRIP® Standard, SGLH = SUPER-GRIP® Light Heavy, SGH = SUPER-GRIP® Heavy.

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NEW! SUPER-GRIP® Tie Mounts



- Unique cradle design provides maximum stability for cable bundle
- For indoor use only
- Material: Nylon 6.6

Part Number	Used With Cable Ties	Length		Width		Height		Mounting Method	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm				
SGTM1S6-C	SGM	.51	13.0	.32	8.0	.23	5.8	#6 (M3) Screw	Natural	100	500
SGTM1S6-C0	SGM	.51	13.0	.32	8.0	.23	5.8	#6 (M3) Screw	Black	100	500
SGTM2S8-C	SGM,SGI,SGS	.63	16.0	.43	10.8	.28	7.0	#8 (M4) Screw	Natural	100	500
SGTM2S8-C0	SGM,SGI,SGS	.63	16.1	.43	10.3	.28	7.0	#8 (M4) Screw	Black	100	500
SGTM3S10-C	SGM,SGI,SGS,SGLH	.86	21.8	.61	15.5	.38	9.5	#10 (M5) Screw	Natural	100	500
SGTM3S10-C0	SGM,SGI,SGS,SGLH	.86	21.8	.61	15.5	.38	9.5	#10 (M5) Screw	Black	100	500

‡Cable tie cross section sizes: SGM = *SUPER-GRIP®* Miniature, SGI = *SUPER-GRIP®* Intermediate, SGS = *SUPER-GRIP®* Standard, SGLH = *SUPER-GRIP®* Light Heavy.

NEW! SUPER-GRIP® Tie Anchor Mounts

- Low profile design keeps bundle close to mounting surface
- Small overall size allows use where space is limited
- Material: Nylon 6.6

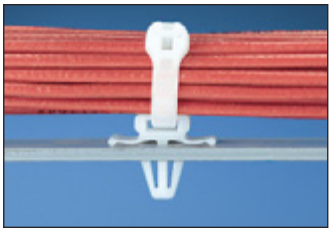


Part Number	Used With Cable Ties‡	Length		Width		Height		Mounting Method	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm				
SGTA1S8-C	SGM, SGI, SGS	.38	9.5	.75	19.0	.20	5.1	#8 (M4) Screw	Natural	100	500
SGTA1S8-C0	SGM, SGI, SGS	.38	9.5	.75	19.0	.20	5.1	#8 (M4) Screw	Black	100	500

‡Cable tie cross section sizes: SGM = *SUPER-GRIP®* Miniature, SGI = *SUPER-GRIP®* Intermediate, SGS = *SUPER-GRIP®* Standard.

Winged Push Mounts

- Unique cradle design provides maximum stability for cable bundle
- For indoor use only
- Material: Nylon 6.6



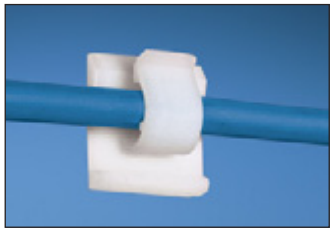
Part Number	Used With Cable Ties‡	Length		Width		Height		Color	Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm	In.	mm			
PWMS-H25-C	M, I, S	.75	19.1	.37	9.4	.61	15.5	Natural	100	1000
PWMS-H25-C0	M, I, S	.75	19.1	.37	9.4	.61	15.5	Black	100	1000

‡Cable tie cross section sizes: M = Miniature, I = Intermediate, S = Standard.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Adhesive Backed Cord Clips

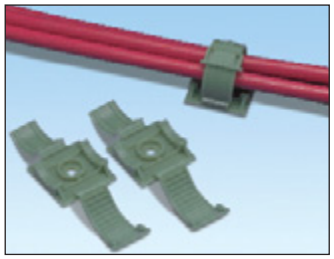
- Cables are easily snapped into or out of the clips
- Rubber-based adhesive provides a strong and reliable bond
- For indoor use only
- Material: Nylon 6.6



Part Number	Max. Bundle Diameter		Length		Width		Height		Color	Max. Static Load		Std. Pkg. Qty.	Std. Ctn. Qty.
	In.	mm	In.	mm	In.	mm	In.	mm		Lbs.	g		
ACC19-A-C	.19	4.8	.75	19.0	.62	16.0	.25	6.5	Natural	.20	91	100	500
ACC19-A-C20	.19	4.8	.75	19.0	.62	16.0	.27	6.7	Black	.20	91	100	500
ACC38-A-C	.38	9.6	1.00	25.4	1.00	25.4	.27	6.9	Natural	.50	227	100	500
ACC38-A-C20	.38	9.6	1.00	25.4	1.00	25.4	.29	6.9	Black	.50	227	100	500
ACC62-A-C	.62	15.7	1.24	31.4	1.12	28.5	.63	16.0	Natural	.70	318	100	500
ACC62-A-C20	.62	15.7	1.24	31.4	1.12	28.5	.63	16.0	Black	.70	318	100	500

CLINCHER™ Adjustable Releasable Clamp

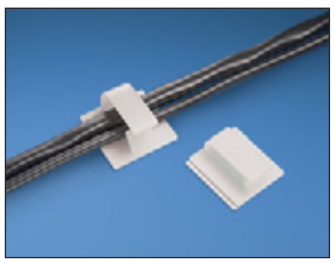
- Adjustable clamp designed to contain a range of cable bundle diameters
- Latch can be released to provide access to cable bundles
- Bundle range: .19" – .69" (4.8mm – 17.5mm) diameter
- Dimensions are 1.00"L x 1.00"W (25.4mm x 25.4mm)
- For indoor use only
- Material: Polypropylene



Part Number	Mounting Method	Color	Max. Static Load		Std. Pkg. Qty.	Std. Ctn. Qty.
			Lbs.	g		
ARC.68-A-Q14	Rubber Adhesive	Gray	.50	227	25	250
ARC.68-S6-Q14	#6 (M3) Screw	Gray	—	—	25	250
ARC.68-A-Q	Rubber Adhesive	White	.50	227	25	250
ARC.68-S6-Q	#6 (M3) Screw	White	—	—	25	250

Bevel Entry Clips

- Beveled entry allows for easy insertion of cable bundle
- Rubber-based adhesive provides a strong and reliable bond
- For indoor use only
- Material: Nylon 6.6



Part Number	Max. Bundle Diameter		Length		Width		Color	Max. Static Load		Std. Pkg. Qty.	Std. Ctn. Qty.
	In.	mm	In.	mm	In.	mm		Lbs.	g		
BEC38-A-L	.38	9.6	1.46	37.1	1.24	31.5	Natural	.91	411	50	500
BEC38-A-L20	.38	9.6	1.46	37.1	1.24	31.5	Black	.91	411	50	500
BEC62-A-L	.62	15.7	1.46	37.1	1.24	31.5	Natural	.91	411	50	500
BEC62-A-L20	.62	15.7	1.46	37.1	1.24	31.5	Black	.91	411	50	500
BEC75-A-L	.75	19.0	1.46	37.1	1.49	37.8	White	1.09	493	50	500
BEC75-A-L20	.75	19.0	1.46	37.1	1.49	37.8	Black	1.09	493	50	500

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

Cable Bundle Strap

- Securely routes large cable bundles
- Rounded edges prevent damage to cable jackets
- Mounting method: two 1/4" (M6) screws
- Dimensions are 4.82"L x 1.00"W x 2.54"H (122.6mm x 25.4mm x 64.5mm)
- For indoor use only



Part Number	Material	Color	Std. Pkg. Qty.	Std. Ctn. Qty.
WBS6-Q	ABS	White	25	125
WBS6-Q60*	Flame Retardant Nylon 6.6	Black	25	125

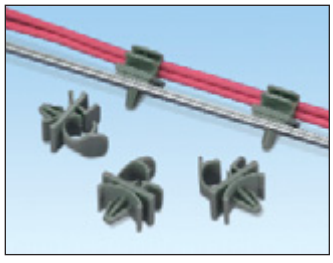
*Manufactured from a UL 94V-0 material

Latching Clips

- Route and secure cords and cables
- Available in six sizes with releasable latch
- Rubber-based adhesive provides a strong and reliable bond
- Push mount products require .25" (6.4mm) diameter hole in panels up to .11" (2.7mm) thick
- For indoor use only
- Material: Nylon 6.6



LWC*-A



LWC*-H25

Part Number	Max. Bundle Diameter In.	Max. Bundle Diameter mm	Length In.	Length mm	Width In.	Width mm	Color	Max. Static Load Lbs.	Max. Static Load g	Std. Pkg. Qty.	Std. Ctn. Qty.
Adhesive Backed Products											
LWC19-A-C	.19	4.8	.85	21.6	.61	15.5	Natural	.25	113	100	1000
LWC19-A-C14	.19	4.8	.85	21.6	.61	15.5	Gray	.25	113	100	1000
LWC19-A-C20	.19	4.8	.85	21.6	.61	15.5	Black	.25	113	100	1000
LWC25-A-C	.25	6.4	.88	22.2	1.00	25.4	Natural	.45	204	100	1000
LWC25-A-C14	.25	6.4	.88	22.2	1.00	25.4	Gray	.45	204	100	1000
LWC25-A-C20	.25	6.4	.88	22.2	1.00	25.4	Black	.45	204	100	1000
LWC38-A-C	.37	9.5	1.00	25.4	1.00	25.4	Natural	.50	227	100	1000
LWC38-A-C14	.37	9.5	1.00	25.4	1.00	25.4	Gray	.50	227	100	1000
LWC38-A-C20	.37	9.5	1.00	25.4	1.00	25.4	Black	.50	227	100	1000
LWC50-A-L	.50	12.7	1.26	32.0	1.00	25.4	Natural	.63	284	50	500
LWC50-A-L14	.50	12.7	1.26	32.0	1.00	25.4	Gray	.63	284	50	500
LWC50-A-L20	.50	12.7	1.26	32.0	1.00	25.4	Black	.63	284	50	500
LWC75-A-L	.75	19.1	1.48	37.6	1.24	31.5	Natural	.93	417	50	500
LWC75-A-L14	.75	19.1	1.48	37.6	1.24	31.5	Gray	.93	417	50	500
LWC75-A-L20	.75	19.1	1.48	37.6	1.24	31.5	Black	.93	417	50	500
LWC100-A-L	1.00	25.4	2.21	56.1	1.97	50.0	Natural	2.25	1020	50	500
LWC100-A-L14	1.00	25.4	2.21	56.1	1.97	50.0	Gray	2.25	1020	50	500
LWC100-A-L20	1.00	25.4	2.21	56.1	1.97	50.0	Black	2.25	1020	50	500
Push Mount Products											
LWC19-H25-C	.19	4.8	.85	21.6	.51	12.8	Natural	—	—	100	1000
LWC19-H25-C14	.19	4.8	.85	21.6	.51	12.8	Gray	—	—	100	1000
LWC25-H25-C	.25	6.4	.86	21.8	.58	14.7	Natural	—	—	100	1000
LWC25-H25-C14	.25	6.4	.86	21.8	.58	14.7	Gray	—	—	100	1000
LWC25-H25-C20	.25	6.4	.86	21.8	.58	14.7	Black	—	—	100	1000
LWC38-H25-C	.37	9.5	.94	23.9	.58	14.7	Natural	—	—	100	1000
LWC38-H25-C14	.37	9.5	.94	23.9	.58	14.7	Gray	—	—	100	1000
LWC50-H25-L	.50	12.7	1.25	31.8	.76	19.3	Natural	—	—	50	500
LWC50-H25-L14	.50	12.7	1.25	31.8	.76	19.3	Gray	—	—	50	500
LWC50-H25-L20	.50	12.7	1.25	31.8	.76	19.3	Black	—	—	50	500
LWC75-H25-L	.75	19.1	1.45	36.8	.87	22.1	Natural	—	—	50	500
LWC75-H25-L14	.75	19.1	1.45	36.8	.87	22.1	Gray	—	—	50	500
LWC75-H25-L20	.75	19.1	1.45	36.8	.87	22.1	Black	—	—	50	500
LWC100-H25-L	1.00	25.4	1.89	47.9	1.00	25.4	Natural	—	—	50	500
LWC100-H25-L14	1.00	25.4	1.89	47.9	1.00	25.4	Gray	—	—	50	500
LWC100-H25-L20	1.00	25.4	1.89	47.9	1.00	25.4	Black	—	—	50	500

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

Cable Holder

- Convenient releasable latch allows easy addition and removal of cables
- Low profile design provides a compact cable routing solution
- Max cable capacity: 2.06"L x .39"H (52.3mm x 9.9mm)
- Dimensions are 2.50"L x 1.02"W x .62"H (63.5mm x 26.0mm x 15.9mm)
- For indoor use only
- Material: Gray Nylon 6.6



Part Number	Mounting Method	Max. Static Load		Std. Pkg. Qty.	Std. Ctn. Qty.
		Lbs.	g		
CH105-A-C14	Rubber adhesive	1.28	581	100	1000
CH105-S6-C14	#6 (M3) Screw	—	—	100	1000

Fixed Diameter Cable Clamps

- Durable nylon cable clamps



Part Number	Max. Bundle Dia.		Width		Bundle Offset		Mounting Method	Std. Pkg. Qty.	Std. Ctn. Qty.
	In.	mm	In.	mm	In.	mm			
CCS12-S8-C	.12	3.1	.37	9.4	.33	8.4	#8 (M4) Screw	100	500
CCS19-S8-C	.19	4.8	.37	9.4	.43	10.9	#8 (M4) Screw	100	500
CCS25-S8-C	.25	6.3	.37	9.4	.41	10.4	#8 (M4) Screw	100	500
CCS25-S10-C	.25	6.3	.37	9.4	.41	10.4	#10 (M5) Screw	100	500
CCS31-S8-C	.31	7.9	.37	9.4	.49	12.4	#8 (M4) Screw	100	500
CCS38-S8-C	.38	9.5	.37	9.4	.59	15.0	#8 (M4) Screw	100	500
CCS44-S8-C	.44	11.1	.37	9.4	.57	14.5	#8 (M4) Screw	100	500
CCS50-S8-C	.50	12.7	.37	9.4	.60	15.2	#8 (M4) Screw	100	500
CCH12-S10-C	.12	3.1	.50	12.7	.36	9.1	#10 (M5) Screw	100	500
CCH19-S10-C	.19	4.8	.50	12.7	.42	10.7	#10 (M5) Screw	100	500
CCH25-S10-C	.25	6.3	.50	12.7	.46	11.7	#10 (M5) Screw	100	500
CCH31-S10-C	.31	7.9	.50	12.7	.50	12.7	#10 (M5) Screw	100	500
CCH38-S10-C	.38	9.5	.50	12.7	.53	13.5	#10 (M5) Screw	100	500
CCH44-S10-C	.44	11.1	.50	12.7	.56	14.2	#10 (M5) Screw	100	500
CCH50-S10-C	.50	12.7	.50	12.7	.59	15.0	#10 (M5) Screw	100	500
CCH56-S10-C	.56	14.2	.50	12.7	.61	15.5	#10 (M5) Screw	100	500
CCH62-S10-C	.62	15.7	.50	12.7	.65	16.5	#10 (M5) Screw	100	500
CCH69-S10-C	.69	17.5	.50	12.7	.75	19.1	#10 (M5) Screw	100	500
CCH75-S10-C	.75	19.1	.50	12.7	.78	19.8	#10 (M5) Screw	100	500
CCH81-S10-C	.81	20.6	.50	12.7	.81	20.6	#10 (M5) Screw	100	500
CCH87-S10-C	.87	22.1	.50	12.7	.84	21.3	#10 (M5) Screw	100	500
CCH100-S10-C	1.00	25.4	.50	12.7	.91	23.1	#10 (M5) Screw	100	500
CCH112-S10-C	1.12	28.4	.50	12.7	.97	24.6	#10 (M5) Screw	100	500
CCH119-S10-C	1.19	30.2	.50	12.7	1.00	25.4	#10 (M5) Screw	100	500
CCH125-S10-C	1.25	31.8	.50	12.7	1.06	26.9	#10 (M5) Screw	100	500
CCH138-S10-C	1.37	34.8	.50	12.7	1.12	28.4	#10 (M5) Screw	100	500
CCH150-S10-C	1.50	38.1	.50	12.7	1.19	30.2	#10 (M5) Screw	100	500

All parts listed are also available in black weather resistant material (add suffix 0). Bulk package only.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

Physical Properties and Colors of Cable Accessory Materials

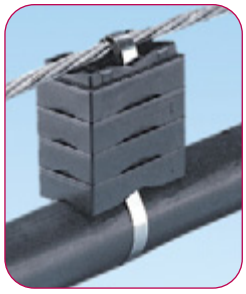
Design Criteria	Nylon 6.6		Weather Resistant Nylon 6.6	Flame Retardant Nylon 6.6		Glass Filled Flame Retardant Nylon 6.6	Flame Retardant Polyethylene
Color	Natural	Black	Black	Black	Natural	Black	None
Part Number Suffix	None	20	0	60	69	None	None
UL Flammability – UL 94	V-2	V-2	V-2	V-0	V-0	V-0	V-0
Gamma Radiation Resistance	$1x10^5$ Rads	$1x10^5$ Rads	$1x10^5$ Rads	$1x10^5$ Rads	$1x10^5$ Rads	N/A	N/A
Water Absorption	1.2% (24 hrs)	1.2% (24 hrs)	1.2% (24 hrs)	1.1% (24 hrs)	1.1% (24 hrs)	0.7% (24 hrs)	0.2% (24 hrs)
UV Resistance	Poor	Fair	Good	Poor	Poor	Poor	N/A
Minimum Continuous Use Temperature	-40°F (-40°C)	-40°F (-40°C)	-40°F (-40°C)	-40°F (-40°C)	-40°F (-40°C)	-40°F (-40°C)	-40°F (-40°C)
Maximum Continuous Use Temperature	185°F (85°C)	185°F (85°C)	185°F (85°C)	221°F (105°C)	221°F (105°C)	230°F (110°C)	194°F (90°C)

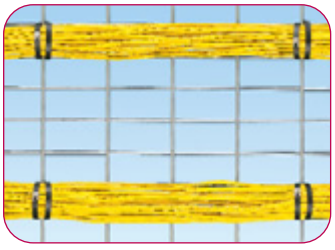
Design Criteria	General Purpose Polypropylene	Weather Resistant Polypropylene	General Purpose ABS	
Color	Black	Black	Black	Natural
Part Number Suffix	None/109	100	None	20
UL Flammability – UL 94	HB	HB	HB	HB
Gamma Radiation Resistance	1x10 Rads	1x10 Rads	N/A	N/A
Water Absorption (24 Hours)	.1% (24 hrs)	.1% (24 hrs)	.3% (24 hrs)	.3% (24 hrs)
UV Resistance	Poor	Good	Poor	Fair
Maximum Continuous Use Temperature	221°F (105°C)	221°F (105°C)	185°F (85°C)	185°F (85°C)
Minimum Continuous Use Temperature	-40°F (-40°C)	-40°F (-40°C)	-40°F (-40°C)	-40°F (-40°C)

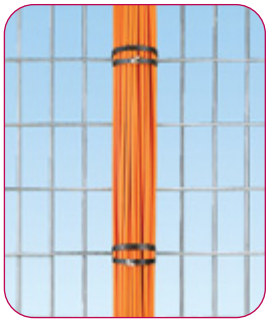
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

PAN-STEEL® STAINLESS STEEL SYSTEM

The PAN-STEEL® System provides a strong, durable method of bundling, identifying, and fastening data and power cables. The ties are ideal for use in critical applications where strength, extreme shock, vibration and flammability are a factor.







- Metal locking ties provide excellent performance in harsh environments
- Coated stainless steel ties offer the strength of steel with the protection of a polyester coating
- Permanent identification solutions withstand the test of time and provide legibility in harsh environments
- State-of-the-art tooling provides speed of installation and lower installed cost

PANDUIT is a leading producer of stainless steel products for communication applications. New designs are continually introduced to meet the application challenges encountered by our customers, while providing the lowest installed cost. For the complete line of PAN-STEEL® Stainless Steel Cable Ties, Accessories, and Tooling, refer to the Electrical Solutions Catalog SA-ELCB03.

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PAN-STEEL® Stainless Steel Ties

Part Number System for PAN-STEEL® Stainless Steel Ties

(Stock Size Tie)

MLT — **6** — **S** — **CP**

Type

MLT = Metal Locking Tie

Bundle Diameter Reference (In.)

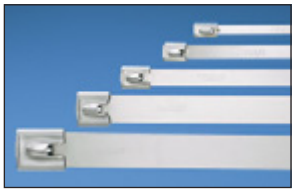
Cross Section

S = Standard
LH = Light Heavy
H = Heavy
EH = Extra Heavy
EH-15 = Extra Heavy-15
SH = Super Heavy

Standard Package Size

Q = 25
L* = 50
LP** = 50
CP = 100
*Standard Cross Section
**Heavy Cross Section

PAN-STEEL® Self-Locking Stainless Steel Cable Ties



- Strong, durable method of bundling and fastening
- Can be used in virtually all indoor, outdoor, and underground (including direct burial) applications
- Well suited for bundling of data and power cables
- Fully rounded edges and exclusive patented lead-in design
- Provides ultimate support for network cables
- AISI 304 stainless steel for general purpose applications

Part Number	Max. Bundle Diameter In.	Max. Bundle Diameter mm	Length* In.	Length* mm	Min. Loop Tensile Strength** Lbs.	Min. Loop Tensile Strength** N	Min. Bundle Diameter In.	Min. Bundle Diameter mm	Width In.	Width mm	Thickness In.	Thickness mm	Recommended Installation Tool	Std. Pkg. Qty.	Std. Ctn. Qty.
AISI 304 Stainless Steel – For General Purpose															
Standard Cross Section															
MLT1S-CP	1.0	25	5.0	127	200	890	.50	12.7	.18	4.6	.010	.25	GS4MT, HTMT, PPTMT or ST2MT	100	500
MLT2S-CP	2.0	51	7.9	201										100	500
MLT2S-L	2.0	51	7.9	201										50	500
MLT2.7S-CP	2.7	69	10.2	259										100	500
MLT4S-CP	4.0	102	14.3	362										100	500
MLT4S-L	4.0	102	14.3	362										50	500
MLT6S-CP	6.0	152	20.5	521	200	890	.50	12.7	.18	4.6	.010	.25		100	500
MLT8S-CP	8.0	203	26.8	679										100	500
MLT10S-CP	10.0	254	33.0	838										100	500
MLT12S-Q	12.0	304	39.3	998										25	125
MLT14S-Q	14.0	355	45.5	1156										25	125
MLT15S-Q	15.0	380	49.2	1250										25	125
Light-Heavy Cross Section															
MLT2LH-LP	2.0	51	7.9	201	250	1112	.50	12.7	.25	6.4	.010	.25	GS4MT, HTMT, PPTMT or ST2MT	50	250
MLT4LH-LP	4.0	102	14.3	362										50	250
MLT6LH-LP	6.0	152	20.5	521										50	250
MLT8LH-LP	8.0	203	26.8	679										50	250
Heavy Cross Section															
MLT2H-LP	2.0	51	7.9	201	450	2000	.50	12.7	.31	7.9	.010	.25	GS4MT, HTMT, PPTMT or ST2MT	50	250
MLT2.7H-LP	2.7	69	10.2	259										50	250
MLT4H-LP	4.0	102	14.3	362										50	250
MLT6H-LP	6.0	152	20.5	521										50	250
MLT8H-LP	8.0	203	26.8	679	450	2000	.50	12.7	.31	7.9	.010	.25		50	250
MLT10H-LP	10.0	254	33.0	838										50	250
MLT12H-Q	12.0	304	39.3	998										25	125
MLT14H-Q	14.0	355	45.5	1156										25	125

*Other lengths available, contact Customer Service.
**Per SAE Standard AS23190/3 (formerly MIL).

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

PAN-STEEL® Fully Coated Stainless Steel Cable Ties – MLTFC Series



- Base metal is AISI 316 grade stainless steel
- Self-locking with low thread force
- Available in standard, heavy, extra-heavy and super-heavy cross sections
- Low smoke
- Halogen-free
- Temperature tolerance -40°F (-40°C) to 302°F (150°C)
- UV resistant

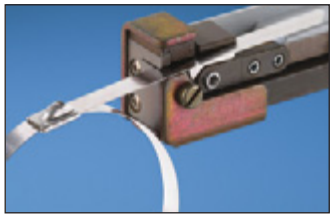
Part Number	Max. Bundle Diameter		Length*		Min. Loop Tensile Strength**		Min. Bundle Diameter		Width		Thickness***		Recommended Installation Tool	Std. Pkg. Qty.	Std. Ctn. Qty.
	In.	mm	In.	mm	Lbs.	N	In.	mm	In.	mm	In.	mm			
Standard Cross Section															
MLTFC2S-CP316	2.0	51	7.9	201	100	445	.50	12.7	.18	4.6	.010	.25	GS4MT, HTMT, PPTMT or ST2MT	100	500
MLTFC4S-CP316	4.0	102	14.3	362										100	500
MLTFC6S-CP316	6.0	152	20.5	521										100	500
MLTFC8S-CP316	8.0	203	26.8	679										100	500
Heavy Cross Section															
MLTFC2H-LP316	2.0	51	7.9	201	250	1112	.50	12.7	.31	7.9	.010	.25	GS4MT, HTMT, PPTMT or ST2MT	50	250
MLTFC4H-LP316	4.0	102	14.3	362										50	250
MLTFC6H-LP316	6.0	152	20.5	521										50	250
MLTFC8H-LP316	8.0	203	26.8	679										50	250
Extra-Heavy Cross Section															
MLTFC4EH-LP316	4.0	102	17.1	434	300	1335	1.0	25.4	.50	12.7	.010	.25	RT1HT or ST2MT	50	250
MLTFC6EH-LP316	6.0	152	23.4	594										50	250
MLTFC8EH-LP316	8.0	203	29.7	754										50	250
Super-Heavy Cross Section															
MLTFC4SH-LP316	4.0	102	17.1	434	450	2000	1.0	25.4	.63	15.9	.015	.38	RT1HT	50	250
MLTFC6SH-LP316	6.0	152	23.4	594										50	250
MLTFC8SH-LP316	8.0	203	29.7	754										50	250

*Other lengths available, contact Customer Service.
**Per SAE Standard AS23190/3 (formerly MIL).
***Base material less coating.

GS4MT Hand Operated Installation Tool



Hand Operated Tool



Side Entry

- Single handle operation for fast installation
- Cable tie side entry for immediate positioning of tie and tool
- Controlled tension, fully adjustable
- Easy removal of excess tie
- Qualified product listed per MIL Standard MS90387-3
- Automatically tensions and cuts off tie when predetermined tension is reached
- Installs standard .18" (4.6mm), light-heavy .25" (6.4mm), and heavy .31" (7.9mm) cross section ties

Part Number	Part Description	Std. Pkg. Qty.
GS4MT	Used with standard, light-heavy and heavy cross section PAN-STEEL® type MLT Ties, type MLTC/MLTFC coated ties, type MLTDH double wrapped ties and WAVE-TY™ Stainless Steel Ties.	1
K4M-BLD	Replacement cutter blade for GS4MT.	1
K4MTG	Replacement tension gripper for GS4MT.	1

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PAN-STEEL® Stainless Steel Marker Plates

- Provides permanent identification of pipes, conduit, valves, cables and equipment in harsh environments
- Designed for use with *PANDUIT*® PAN-STEEL® Stainless Steel Cable Ties for fast installation at lowest installed cost
- All marker plates can be embossed or laser etched with *PANDUIT* Factory Custom Marking Service
- For on-site custom marking use the metal indenting machine



MMP350



MMP350H



MMP350W38

Part Number	Material	Color	Length		Width		Custom Marking Parameters**		Used with PAN-STEEL Cable Ties	Std. Pkg. Qty.	Std. Ctn. Qty.
			In.	mm	In.	mm	Max. 3/16" (4.77mm) Characters per Line	Max. Lines			
MMP350-C	304 Stainless Steel	Natural	3.50	89	.75	19	23	3	MLT-S	100	1000
MMP350-C316	316 Stainless Steel	Natural	3.50	89	.75	19	23	3	MLT-S	100	1000
MMP350H-C	304 Stainless Steel	Natural	3.50	89	.75	19	20	3	MLT-H	100	1000
MMP350H-C316	316 Stainless Steel	Natural	3.50	89	.75	19	20	3	MLT-H	100	1000
MMP350W38-C	304 Stainless Steel	Natural	3.50	89	.38	10	23	1	MLT-S	100	1000
MMP350W38-C316	316 Stainless Steel	Natural	3.50	89	.38	10	23	1	MLT-S	100	1000

**See page F3.40 for *PANDUIT* Factory Custom Marking Service.

NEW! PAN-ALUM™ Aluminum Marker Plates



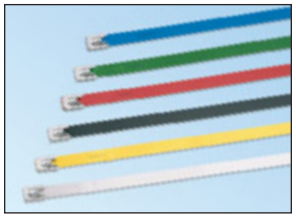
- Lightweight, aluminum construction for flexibility and ease of handling
- Five color options in addition to natural aluminum provide quick visual identification, ideal for applications requiring color coding
- Easy feed cable tie slot provides easy cable tie insertion to speed installation

Part Number	Material	Color	Length		Width		Custom Marking Parameters**		Used with PAN-ALUM™ Cable Ties	Std. Pkg. Qty.	Std. Ctn. Qty.
			In.	mm	In.	mm	Max. 3/16" (4.77mm) Characters per Line	Max. Lines			
MMP350H-CALBU	Anodized Aluminum	Blue	3.50	89	.75	19	20	3	MLT1H-LPAL* MLT2H-LPAL* and MLT4H-LPAL*	100	1000
MMP350H-CALGR		Green								100	1000
MMP350H-CALRD		Red								100	1000
MMP350H-CALBL		Black								100	1000
MMP350H-CALYL		Yellow								100	1000
MMP350H-CAL	Aluminum	Natural								100	1000

*See PAN-ALUM™ Ties for matching natural finish and five colors.
**See page F3.40 for *PANDUIT* Factory Custom Marking Service.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

NEW! PAN-ALUM™ Aluminum Cable Ties



- Lightweight, aluminum construction for flexibility and ease of handling
- Five color options in addition to natural aluminum finish for color coding applications
- Smooth surfaces and rounded edges, protects the cable bundle and the installer for improved productivity, job site safety, and reliability
- Patented self-locking head design, reduces installation steps for improved productivity
- For use with PAN-ALUM™ Marker Plates for fast installation at the lowest installed cost

Part Number	Max. Bundle Diameter		Length		Color	Min. Loop Tensile Strength**		Min. Bundle Diameter		Width		Thickness		Recommended Installation Tool***	Std. Pkg. Qty.	Std. Ctn. Qty.
	In.	mm	In.	mm		Lbs.	N	In.	mm	In.	mm	In.	mm			
MLT1H-LPAL*	1.0	25	5.5	140	Aluminum	50	222	.50	12.7	.31	7.9	.010	.03	ST2MT or HTMT	50	250
MLT2H-LPAL*	2.0	51	7.9	201											50	250
MLT4H-LPAL*	4.0	102	14.3	362											50	250

*For other colors replace * with suffix (BU) for Blue, (GR) for Green, (RD) for Red, (BL) for Black and (YL) for Yellow.
**Per SAE Standard AS23190/3 (formerly MIL).
***For the complete line of PAN-STEEL® Stainless Steel Installation Tooling, refer to the Electrical Solutions Catalog SA-ELCB03.

NEW! Metal Embossing Tool and Tape System

- Creates custom length identification with PAN-STEEL® Marker Plates and Tags
- Embosses 3/16" (4.77mm) characters onto rolls of stainless steel or aluminum tape
- Ability to create a raised cable tie slot for fast installation



MEHT



Part Number	Part Description	Std. Pkg. Qty.
Tool Kit		
MEHT	Includes tool, carrying case, one roll each META (aluminum) and METS4 (stainless steel) tape. Characters include: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z 2 3 4 5 6 7 8 9 -.	1
Tape		
META-X	.50" x 16' (12.7mm x 4.9m) aluminum tape*.	10
METS3-X	.50" x 21' (12.7mm x 6.4m) 316 grade stainless steel tape.	10
METS4-X	.50" x 21' (12.7mm x 6.4m) 304 grade stainless steel tape.	10

*Aluminum ties are recommended for use with aluminum tape to prevent galvanic reaction (corrosion that can occur between stainless steel and aluminum in certain environments).

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NEW! Metal Indenting Machine

- Provides quick, easy, and permanent identification with *PANDUIT*® *PAN-ALUM*™ Marker Plates and Cable Ties and *PAN-STEEL*® Stainless Steel Marker Plates, Tags, Cable Ties and Straps
- Automatic table indexing advances material forward for convenience and improved productivity
- New, improved design features aluminum base and durable construction



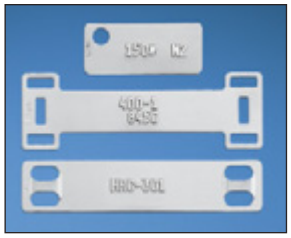


Part Number	Part Description	Std. Pkg. Qty.
Indenting Machine		
MIM094	Indenting machine with 3/32" (2.38mm) character wheel.	1
MIM125	Indenting machine with 1/8" (3.18mm) character wheel.	1
MIM187	Indenting machine with 3/16" (4.77mm) character wheel.	1
Interchangeable Wheel Kits		
MIW094	3/32" (2.38mm) character wheel kit (wheel and indexing gear).	1
MIW125	1/8" (3.18mm) character wheel kit (wheel and indexing gear).	1
MIW187	3/16" (4.77mm) character wheel kit (wheel and indexing gear).	1

NEW! *PANDUIT* Factory Custom Marking Service

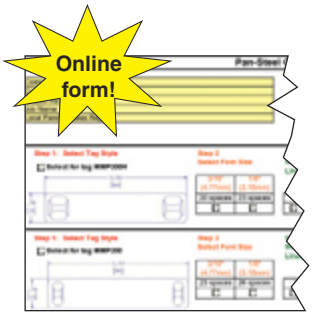


PANDUIT Factory Custom Marking Service simplifies identification with high quality, made-to-order custom embossed marker plates and tags or laser etched cable ties, marker plates, and tags. *PANDUIT* offers rapid direct shipment with fast turn around on custom marking orders worldwide. Partner with *PANDUIT* to create an effectively identified workplace.



EMBOSSING SERVICE

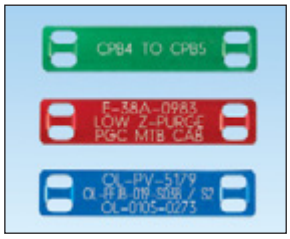
- Used on rectangular metal marker plates and tags which are a maximum of .020" (.5mm) thick and min. .75" (19mm) width
- Excellent for applications that are exposed to dirt and paint
- Upper case "raised" characters
- Alphanumeric and sequential numbering



To select and order custom embossed marker plate and tags:

- Use online order form (C2-0677) at www.panduit.com/permanentID to select the proper marker plate or tag for your application. Email order form to your Authorized *PANDUIT* Distributor for order placement or contact *PANDUIT* Customer Service for assistance.





LASER MARKING SYSTEM

- Used on all metal marker plates, tags, and cable ties
- BOLD block letter
- Upper and lower case character capability
- Ability to create text and graphics
- Alphanumeric and sequential numbering

To order laser etched plates and tags – Contact *PANDUIT*

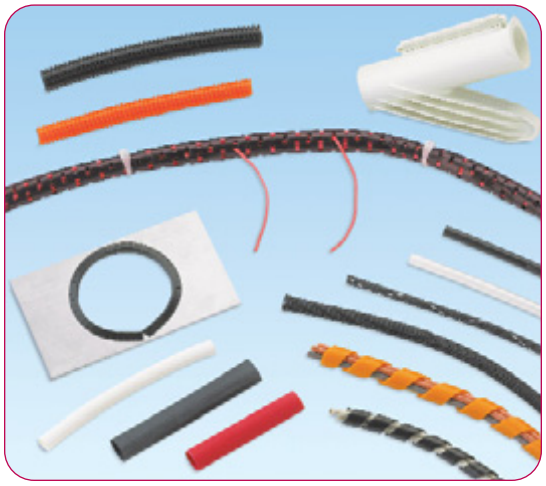
Character sizes available:
1/8" (3.18mm)
1/4" (6.35mm)
3/16" (4.77mm)
5/16" (7.94mm)
1/2" (12.7mm) – Laser only

Visit www.panduit.com or contact Customer Service for a custom marking order form.

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ABRASION PROTECTION

PANDUIT abrasion protection products provide an economical and easy way to insulate, protect, bundle and color-code components and cable. A wide variety of sizes and materials are available to meet a broad range of indoor and outdoor applications. To help assure optimum quality, *PANDUIT* abrasion protection products are designed and manufactured to meet applicable quality standards including International, UL, Military, ISO and Aerospace.



- ***PAN-WRAP***™ **Split Harness Wrap bundles and protects wire and cable**
- **Grommet edging protects wire and cable from damage caused by sharp panel edges**
- **Spiral wrap provides the largest variety of colors, materials, and sizes to meet a variety of needs**
- **Braided expandable sleeving provides continuous abrasion resistance and lightweight durable protection, with a flexible open weave that will not trap heat or humidity**
- **Corrugated loom tubing is crush, impact, and abrasion resistant to reduce the risk of damage to wire and cable**
- **Heat shrink is available in many different materials and sizes to meet a variety of needs**

PANDUIT abrasion protection products provide quality at the lowest installed cost. With a continued focus on new product development, *PANDUIT* continues to meet customer needs.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

PAN-WRAP™ Split Harness Wrap

- Patented slot pattern provides improved flexibility and abrasion protection in any application
- Unique wall design provides for easy cable breakouts
- Innovative design maintains uniform bundle protection in dynamic applications
- Large overlap accommodates a wide range of bundle diameters
- Packaged on a reel for easy handling and dispensing of product



Part Number	Material	Color	Length Per Reel		Max. Bundle Diameter		Min. Bundle Diameter‡		Nominal I.D.		Std. Pkg. Qty*
			Ft.	m	In.	mm	In.	mm	In.	mm	
PW50F-T20	Polyethylene	Black	200	61.1	.55	14.0	.43	10.9	.50	12.7	1
PW50F-T	Polyethylene	Natural	200	61.1	.55	14.0	.43	10.9	.50	12.7	1
PW50FR-T**	Flame Retardant Polyethylene	Natural	200	61.1	.55	14.0	.43	10.9	.50	12.7	1
PW50FR-T20**	Flame Retardant Polyethylene	Black	200	61.1	.55	14.0	.43	10.9	.50	12.7	1
PW75F-C20	Polyethylene	Black	100	30.5	.81	20.6	.55	14.0	.75	19.1	1
PW75F-C	Polyethylene	Natural	100	30.5	.81	20.6	.55	14.0	.75	19.1	1
PW75FR-C**	Flame Retardant Polyethylene	Natural	100	30.5	.81	20.6	.55	14.0	.75	19.1	1
PW75FR-C20**	Flame Retardant Polyethylene	Black	100	30.5	.81	20.6	.55	14.0	.75	19.1	1
PW100F-C	Polyethylene	Natural	100	30.5	1.13	28.7	.81	20.6	1.00	25.4	1
PW100F-C20	Polyethylene	Black	100	30.5	1.13	28.7	.81	20.6	1.00	25.4	1
PW100FR-C**	Flame Retardant Polyethylene	Natural	100	30.5	1.13	28.7	.81	20.6	1.00	25.4	1
PW100FR-C20**	Flame Retardant Polyethylene	Black	100	30.5	1.13	28.7	.81	20.6	1.00	25.4	1
PW150F-L	Polyethylene	Natural	50	15.2	1.63	41.4	1.13	28.7	1.50	38.1	1
PW150F-L20	Polyethylene	Black	50	15.2	1.63	41.4	1.13	28.7	1.50	38.1	1
PW150FR-L**	Flame Retardant Polyethylene	Natural	50	15.2	1.63	41.4	1.13	28.7	1.50	38.1	1
PW150FR-L20**	Flame Retardant Polyethylene	Black	50	15.2	1.63	41.4	1.13	28.7	1.50	38.1	1

*Order number of reels required.
‡Diameter can be further reduced with the use of cable ties.
**Flame retardant products are manufactured from a material that is rated UL 94V-0.

PAN-WRAP™ Installation Tools





- Patented installation tool with 180° opening allows easy loading of maximum bundle diameters to speed installation, providing the lowest installed cost

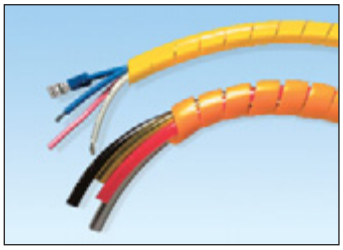
Part Number	Color	For Use With	Std. Pkg. Qty.*
PWT50	White	PW50F	1
PWT75	White	PW75F	1
PWT100	White	PW100F	1
PWT150	White	PW150F	1

*Order number of tools required.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

Spiral Wrap

- Harness multiple cables into a single manageable bundle
- Allows breakouts of single/multiple cables
- Provides protection for cables
- Multiple colors allow easy identification of cable bundles
- Installation tool supplied in each package
- Bundle range: .38" – 4.00" (9.5mm – 101.6mm)
- Packaged on a 100' (30.5m) reel‡ for easy handling and dispensing of product



Part Number	Material	Color	Length of Reel‡		Std. Pkg. Qty.*
			Ft.	m	
T50F-C	Polyethylene	Natural	100	30.5	1
T50F-C0	Weather Resistant Polyethylene	Black	100	30.5	1
T50F-C1	Polyethylene	Brown	100	30.5	1
T50F-C2	Polyethylene	Red	100	30.5	1
T50F-C3Y	Polyethylene	Orange	100	30.5	1
T50F-C4Y	Polyethylene	Yellow	100	30.5	1
T50F-C5	Polyethylene	Green	100	30.5	1
T50F-C6	Polyethylene	Blue	100	30.5	1
T50F-C7	Polyethylene	Purple	100	30.5	1
T50F-C8	Polyethylene	Gray	100	30.5	1
T50F-C10	Polyethylene	White	100	30.5	1
T50F-C16	Polyethylene	Pink	100	30.5	1
T50FR-C**	Flame Retardant Polyethylene	White	100	30.5	1
T50FR-C20**	Flame Retardant Polyethylene	Black	100	30.5	1

‡Reel packaging may contain splices.
*Order number of reels required.
**Flame retardant products are manufactured from a material that is rated UL 94V-0.
Contact Customer Service for additional sizes and materials available.

NEW! Fray Resistant Braided Expandable Sleeving

- Fray-resistant design resists fraying when cut with scissors
- Provides continuous abrasion protection resistance for wires, cables, and tubing
- For indoor use only



Part Number	Nominal I.D.		Bundle Diameter Range		Length of Reel‡		Std. Pkg. Qty.
	In.	mm	In.	mm	Ft.	m	
SE12PSC-TR0	.125	3.18	.125 – .250	3.18 – 6.35	200	61.0	1
SE25PSC-TR0	.25	6.4	.156 – .438	3.97 – 11.11	200	61.0	1
SE38PSC-TR0	.38	9.5	.187 – .625	4.76 – 15.88	200	61.0	1
SE50PSC-CR0	.50	12.7	.250 – .750	6.35 – 19.05	100	30.5	1
SE75PSC-CR0	.75	19.1	.625 – 1.00	15.88 – 25.40	100	30.5	1
SE125PSC-LR0	1.25	31.8	1.00 – 1.50	25.40 – 38.10	50	15.2	1
SE150PSC-LR0	1.50	38.1	1.25 – 2.00	31.75 – 50.80	50	15.2	1

‡Reel packaging may contain splices.
All product color is black.

Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com

A. System Overview
B1. Cable
B2. Modules
B3. Work Area Outlet Solutions
B4. Surface Raceway
B5. Zone Cabling Systems
B6. Wireless Solutions
C1. Copper Patch Panels, Cords & Punchdowns
C2. Fiber Connectors, Enclosures & Patch Cords
C3. Overhead & Underfloor Routing Systems
C4. Cabinets, Racks & Cable Management
C5. Grounding & Bonding
D. Managed System Solutions
E. Industrial
F1. Labeling & Identification
F2. Wiring Duct
F3. Cable Ties & Accessories
G. Index

Corrugated Loom Tubing

- Provides protection for cables
- Packaged on a reel for easy handling and dispensing of product
- For indoor use only
- Material: Polyethylene



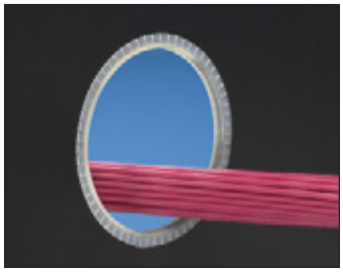
Part Number	Color	Inside Diameter		Outside Diameter		Length Per Reel‡		Std. Pkg. Qty.*
		In.	mm	In.	mm	Ft.	m	
Slit Wall								
CLT25F-C3	Orange	.27	6.7	.39	9.9	100	30.5	1
CLT38F-C3	Orange	.41	10.5	.56	14.2	100	30.5	1
CLT50F-C3	Orange	.51	12.8	.67	17.0	100	30.5	1
CLT75F-C3	Orange	.76	19.3	.94	23.8	100	30.5	1
CLT100F-C3	Orange	.92	23.2	1.09	27.7	100	30.5	1
CLT125F-L3	Orange	1.29	32.8	1.50	38.1	50	15.2	1
CLT150F-X3	Orange	1.55	39.1	1.86	47.2	10	3.0	1
CLT188F-X3	Orange	1.88	47.8	2.17	55.1	10	3.0	1
CLT25F-C20	Black	.27	6.7	.39	9.9	100	30.5	1
CLT38F-C20	Black	.41	10.5	.56	14.2	100	30.5	1
CLT50F-C20	Black	.51	12.8	.67	17.0	100	30.5	1
CLT75F-C20	Black	.76	19.3	.94	23.8	100	30.5	1
CLT100F-C20	Black	.92	23.2	1.09	27.7	100	30.5	1
CLT125F-L20	Black	1.29	32.8	1.50	38.1	50	15.2	1
CLT150F-T20	Black	1.55	39.1	1.86	47.2	200	61.0	1
CLT150F-X20	Black	1.55	39.1	1.86	47.2	10	3.0	1
CLT188F-X20	Black	1.88	47.8	2.17	55.1	10	3.0	1
CLT150F-X4	Yellow	1.55	39.1	1.86	47.2	10	3.0	1
CLT188F-X4	Yellow	1.88	47.8	2.17	55.1	10	3.0	1
Solid Wall								
CLTS25F-C3	Orange	.28	7.0	.39	9.9	100	30.5	1
CLTS38F-C3	Orange	.42	10.5	.56	14.1	100	30.5	1
CLTS50F-C3	Orange	.51	12.8	.67	17.0	100	30.5	1
CLTS75F-C3	Orange	.76	19.3	.94	23.8	100	30.5	1
CLTS100F-C3	Orange	.92	23.2	1.09	27.7	100	30.5	1
CLTS125F-L3	Orange	1.29	32.8	1.50	38.1	50	15.2	1
CLTS150F-D3	Orange	1.48	37.6	1.73	43.9	500	152.4	1
CLTS25F-C	Black	.28	7.0	.39	9.9	100	30.5	1
CLTS38F-C	Black	.42	10.5	.56	14.1	100	30.5	1
CLTS50F-C	Black	.51	12.8	.67	17.0	100	30.5	1
CLTS75F-C	Black	.76	19.3	.94	23.8	100	30.5	1
CLTS100F-C	Black	.92	23.2	1.09	27.7	100	30.5	1
CLTS125F-L	Black	1.29	32.8	1.50	38.1	50	15.2	1

‡Reel packaging may contain splices.
*Order number of reels required.
Contact Customer Service for additional sizes, materials, colors and bulk packaging.

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Adhesive Lined Grommet Edging

- Adhesive ensures product stays in place
- Slotted wall product used on irregularly shaped and round panel holes
- Solid wall product used on straight panels
- Highly flexible material
- General purpose material for use up to 122°F (50°C)
- Packaged on a 100' (30.5m) reel‡ for easy handling and dispensing of product

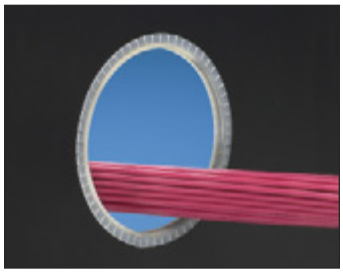


Part Number	Width In.	Width mm	Height In.	Height mm	Material	Color	Panel Thickness Range In.	Panel Thickness Range mm	Std. Pkg. Qty.‡
Slotted Wall									
GEE62F-A-C	.13	3.3	.16	4.1	Polyethylene	Natural	.036 – .062	.9 – 1.6	1
GEE62F-A-C0	.13	3.3	.16	4.1	Weather Resistant Polyethylene	Black	.036 – .062	.9 – 1.6	1
GEE99F-A-C	.17	4.3	.19	4.7	Polyethylene	Natural	.062 – .099	1.6 – 2.5	1
GEE99F-A-C0	.17	4.3	.19	4.7	Weather Resistant Polyethylene	Black	.062 – .099	1.6 – 2.5	1
GEE144F-A-C	.21	5.4	.22	5.6	Polyethylene	Natural	.099 – .144	2.5 – 3.7	1
GEE144F-A-C0	.21	5.4	.22	5.6	Weather Resistant Polyethylene	Black	.099 – .144	2.5 – 3.7	1
Solid Wall									
GES62F-A-C	.13	3.3	.16	4.1	Polyethylene	Natural	.036 – .062	.9 – 1.6	1
GES62F-A-C0	.13	3.3	.16	4.1	Weather Resistant Polyethylene	Black	.036 – .062	.9 – 1.6	1
GES99F-A-C	.17	4.3	.19	4.8	Polyethylene	Natural	.062 – .099	1.6 – 2.5	1
GES99F-A-C0	.17	4.3	.19	4.8	Weather Resistant Polyethylene	Black	.062 – .099	1.6 – 2.5	1
GES144F-A-C	.21	5.3	.22	5.6	Polyethylene	Natural	.099 – .144	2.5 – 3.7	1
GES144F-A-C0	.21	5.3	.22	5.6	Weather Resistant Polyethylene	Black	.099 – .144	2.5 – 3.7	1

‡Reel packaging may contain splices.
Order the number of reels required.

Flame Retardant Grommet Edging

- Flame retardant products are manufactured from a material that is rated UL 94-V0
- Slotted wall product used on irregularly shaped and round panel holes
- Solid wall product used on straight panels
- Highly flexible material
- General purpose material for use up to 122°F (50°C)
- Packaged on a 100' (30.5m) reel‡ for easy handling and dispensing of product



Part Number	Width In.	Width mm	Height In.	Height mm	Material	Color	Panel Thickness Range In.	Panel Thickness Range mm	Std. Pkg. Qty.‡
Slotted Wall									
GEE36FR-C	.11	2.7	.12	3.0	Flame Retardant Polyethylene	Natural	.036 – .036	.70 – .90	1
GEE62FR-C	.131	3.3	.160	4.1	Flame Retardant Polyethylene	Natural	.036 – .062	.9 – 1.6	1
GEE99FR-C	.169	4.3	.160	3.9	Flame Retardant Polyethylene	Natural	.062 – .099	1.6 – 2.5	1
GEE144FR-C	.213	5.4	.222	5.9	Flame Retardant Polyethylene	Natural	.099 – .144	2.5 – 3.7	1
Solid Wall									
GES36FR-C	.106	2.8	.117	3.1	Flame Retardant Polyethylene	Natural	.026 – .036	.7 – .9	1
GES62FR-C	.131	3.3	.160	4.1	Flame Retardant Polyethylene	Natural	.036 – .062	.9 – 1.6	1
GES99FR-C	.169	4.3	.186	4.8	Flame Retardant Polyethylene	Natural	.062 – .099	1.6 – 2.5	1
GES144FR-C	.213	5.3	.222	5.6	Flame Retardant Polyethylene	Natural	.099 – .144	2.5 – 3.7	1

‡Reel packaging may contain splices.
Order the number of reels required.

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Flame Retardant End Caps

- Heat indicating line ensures correct temperature is applied
- Cross-linked, UV resistant material improves flame retardancy, chemical, and temperature resistance
- Shrink ratio of 3:1 insulates a wide range of diameters and irregular shapes, which reduces inventory costs



Part Number	Min. Expanded I.D.		Max. Recovered I.D.		Copper Conductor Size Range	Cap Length		Std. Pkg. Qty.	Std. Ctn. Qty.
	In.	mm	In.	mm		In.	mm		
HSECFR0.5-X	.51	13.0	.16	4.1	#8 – #6 AWG	3.00	76.2	10	100
HSECFR0.8-X	.75	19.0	.24	6.1	#6 – #2 AWG	3.50	88.9	10	100
HSECFR1.0-X	1.10	27.9	.35	8.9	#1 – #3/0 MCM	4.00	101.6	10	100
HSECFR1.5-5	1.50	38.1	.47	11.9	#2/0 – #350 MCM	4.50	114.3	5	50
HSECFR2.0-5	2.00	50.8	.63	16.0	#250 – #500 MCM	4.50	114.3	5	50

HSTTV Heat Shrink

- Cross-linked, UV resistant material improves flame retardancy, chemical and temperature resistance, and meets UL 224VW-1 rating
- Fast shrink time
- Shrink ratio of 2:1
- Packaged in 6" lengths
- Meets Mil Spec AMS-DTL-23053/5 Class 3



Part Number	Nominal Diameter/ Size	Min. Expanded I.D.		Max. Recovered I.D.		Std. Pkg. Qty. (pieces)	Std. Ctn. Qty. (packages)
		In.	mm	In.	mm		
HSTTV05-Y	3/64	.046	1.2	.023	.6	26	10
HSTTV06-Y	1/16	.063	1.6	.031	.8	26	10
HSTTV09-Y	3/32	.093	2.4	.046	1.2	24	10
HSTTV12-Y	1/8	.125	3.2	.062	1.6	20	10
HSTTV19-Y	3/16	.187	4.8	.093	2.4	18	10
HSTTV25-Y	1/4	.250	6.4	.125	3.2	14	10
HSTTV38-Y	3/8	.375	9.5	.187	4.8	12	10
HSTTV50-Y	1/2	.500	12.7	.250	6.4	10	10
HSTTV75-Y	3/4	.750	19.0	.375	9.5	8	10
HSTTV100-Y	1	1.00	25.4	.500	12.7	6	10

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Heat Shrink in 6 In. Pieces; Single Color, Single Diameter

- General purpose heat shrink tubing for dry locations
- Small package holds unused tubing and fits in a tool box
- Applications include insulating, protecting, harnessing and identifying wires
- Material type: Cross-linked Polyolefin
- Shrink ratio: 2:1
- Temperature range: -67°F – 275°F (-55°C – 135°C)
- Flammability rating: Flame retardant EXCEPT Clear
- Voltage: 600 V
- UL Recognized, CSA Certified
- Mil Spec: AMS-DTL-23053/5 Class 1 (Colors) Class 2 (Clear)
- Part Numbers shown are black**

DRY SHRINK HEAT SHRINK IP62



Part Number	Nominal Diameter/Size	Min. Expanded I.D.		Max. Recovered I.D.		Std. Pkg. Qty.	Std. Ctn. Qty.
		In.	mm	In.	mm		
HSTT06-Y	1/16	.063	1.6	.031	.8	1	10
HSTT09-Y	3/32	.093	2.4	.046	1.2	1	10
HSTT12-Y	1/8	.125	3.2	.062	1.6	1	10
HSTT19-Y	3/16	.187	4.8	.093	2.4	1	10
HSTT25-Y	1/4	.250	6.4	.125	3.2	1	10
HSTT38-Y	3/8	.375	9.5	.187	4.8	1	10
HSTT50-Y	1/2	.500	12.7	.250	6.4	1	10
HSTT75-Y	3/4	.750	19.0	.375	9.5	1	10
HSTT100-Y	1	1.00	25.4	.500	12.7	1	10

**For colors add C (Clear), 2 (Red), 4 (Yellow), 5 (Green), 6 (Blue) and 10 (White) to suffix (Example: HSTT06-YC).

Heat Shrink in 6 In. Pieces; Multi-Color, Single Diameter

- Applications include insulating, protecting, and color coding wires and cables
- Voltage: 600 V
- Shrink ratio: 2:1
- Flammability: Flame retardant EXCEPT Clear
- UL Recognized, CSA Certified
- Mil Spec: AMS-DTL-23053/5 Class 1 (Colors) Class 2 (Clear)
- Temperature range: -67°F to 275°F (-55°C – 135°C)
- For dry locations
- Material: Cross-linked Polyolefin
- Colors include: clear, red, yellow, green, blue and white

DRY SHRINK HEAT SHRINK



Part Number	Nominal Diameter/Size	Min. Expanded I.D.		Max. Recovered I.D.		Std. Pkg. Qty.	Std. Pkg. Qty.
		In.	mm	In.	mm		
HSTT06-YK1	1/16	.063	1.6	.031	.8	1	10
HSTT09-YK1	3/32	.093	2.4	.046	1.2	1	10
HSTT12-YK1	1/8	.125	3.2	.062	1.6	1	10
HSTT19-YK1	3/16	.187	4.8	.093	2.4	1	10
HSTT25-YK1	1/4	.250	6.4	.125	3.2	1	10
HSTT38-YK1	3/8	.375	9.5	.187	4.8	1	10
HSTT50-YK1	1/2	.500	12.7	.250	6.4	1	10
HSTT75-YK1	3/4	.750	19.0	.375	9.5	1	10
HSTT100-YK1	1	1.00	25.4	.500	12.7	1	10

Meets Mil Spec AMS-DTL-23053/5 Class 1 except clear which is manufactured from flammable polyolefin cross-linked material and meets AMS-DTL-23053/5 Class 2.

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Heat Shrink in 6 In. Pieces; Black, Multiple Diameters

- Applications include insulating, protecting, and color-coding wires and cables
- Voltage: 600 V
- Shrink ratio: 2:1
- Flammability: Flame retardant EXCEPT Clear
- UL Recognized, CSA Certified
- Mil Spec: AMS-DTL-23053/5 Class 1 (Colors) Class 2 (Clear)
- Temperature range: -67°F – 275°F (-55°C to 135°C)
- For dry locations
- Material: Cross-linked Polyolefin

DRY SHRINK HEAT SHRINK IP62



Part Number	Nominal Diameter/Size	Number of Pieces by Diameter	Std. Pkg. Qty.	Std. Ctn. Qty.
HSTT-YK1	Various – Smaller Range	Two pcs. each 1/8", 1/16", 3/16", 3/32", 1/4", 1/2", 3/8"	1	10
HSTT-YK2	Various – Larger Range	Two pcs. each 3/8", 1/2", 3/4", 1"	1	10

Heat Shrink in 6 In. Pieces; Yellow/Green Stripe, Multiple Diameters

- Applications include insulating, protecting, and color coding wires and cables
- Voltage: 600 V
- Shrink ratio: 2:1
- Flammability: Flame Retardant
- UL Recognized, CSA Certified
- Mil Spec: AMS-DTL-23053/5 Class 1
- Temperature range: -67°F to 275°F (-55°C to 135°C)
- For dry locations
- Material: Cross-linked Polyolefin



Part Number	Nominal Diameter/Size	Number of Pieces by Diameter	Std. Pkg. Qty.	Std. Ctn. Qty.
HSTT-YK1-45	Various – Smaller Range	Two pcs. each 1/8", 3/16", 1/4", 3/8"	1	10
HSTT-YK2-45	Various – Larger Range	Two pcs. each 3/8", 1/2", 3/4"	1	10

Heat Shrink Tools and Accessories

- For use with all *PANDUIT* heat shrink
- Mica insulation in the heat element provides extended life to HSG heat tools
- Neoprene jacketed cord with molded strain relief
- Adjustable stand included
- Accessories available to reduce shrink time



Part Number	Part Description	Std. Pkg. Qty.	Std. Ctn. Qty.
Heat Shrink Tool			
HSG-115V-650	Heat gun with temperature range of 650°F (344°C) to 900°F (482°C).	1	—
Heat Shrink Tool Accessories			
HSG-A1	Shrink tube reflector for tubing up to 3/4" inside diameter. Directs heat around tubing to reduce shrink time.	1	10
HSG-A2	Shrink tube reflector for tubing up to 1 1/2" inside diameter. Directs heat around tubing to reduce shrink time.	1	10
HSG-A3	Shrink tube concentrator. Directs heat toward tubing and away from heat sensitive items.	1	10
HSG-A4	Black polyethylene case stores heat gun, stand and all three accessories.	1	—

Order number of pieces required, in multiples of Standard Package Quantity. Prime items appear in **BOLD**.
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Abrasion Protection Materials Technical Data

		Ratings and Approvals			Physical Properties				Chemical Resistance			
		UL Temperature Index	Flammability (UL 94)	Melting Temperature	Abrasion Resistance (Lower number is better)	Specific Gravity (D792)	Minimum Tensile @23°C (psi)	Water Absorption (Max. 24 hrs.)	Organic Solvents	Alkalies	Acids	Petro-Chemicals
SPIRAL WRAP	**Natural Polyethylene** Lowest cost material for indoor use. Natural is available in all sizes.	-40°F (-40°C) to 122°F (50°C)	HB	239°F (115°C)	22 mg	.91 – .93	1400 (D368)	.01%	Resistant below 140°F (60°C) except to chlorinated solvents	Resistant	Resistant except to oxidizing acids	Some Discoloration
	Weather Resistant Polyethylene This material has the same properties as natural polyethylene, and also has additives which allow it to resist the effects of ultraviolet light and acid rain in an outdoor environment. This product is available only.	-40°F (-40°C) to 122°F (50°C)	HB	239°F (115°C)	20 mg	.93 – 1.09	2000 (D368)	.03%	Resistant below 140°F (60°C) except to chlorinated solvents	Resistant	Resistant except to oxidizing acids	No Discoloration
	Flame Retardant Polyethylene UL 94-V0 rating. This material is self extinguishing and passes the UL 94 flame retardant test with a V0 rating.	-40°F (-40°C) to 194°F (90°C)	V-0	270°F (132°C)	22 mg	1.23 – 1.37	1500 (D368)	.02%	Resistant except to halogenated hydrocarbons	Resistant	Resistant	Resistant Some Discoloration
PAN-WRAP™	**Natural Polyethylene** Lowest cost material for indoor use up to 50°C. Natural is available in all sizes.	-40°F (-40°C) to 122°F (50°C)	HB	115°C	22 mg	.91 – .93	1400 (D638)	.01%	Resistant below 60°C except to chlorinated solvents	Resistant	Resistant except to oxidizing acids	Some Discoloration
	Flame Retardant Polyethylene UL 94-V0 rating. This material is self extinguishing and passes the UL 94 flame retardant test with a V0 rating.	-40°F (-40°C) to 194°F (90°C)	V-0	132*°C	22 mg	1.15	1500 (D638)	.02%	Resistant except to halogenated hydrocarbons	Resistant	Resistant	Resistant Some Discoloration
SLEEVING	**Polyethylene Terephthalate (PET)** This material is a thermoplastic polyester material designed for indoor applications.It is rated for use up to 257°F and will tolerate short-term exposure up to 446°F. Colors: Black, White and Gray	-94°F (-70°C) to 257°F (125°C)	HB	500°F (260°C)	—	1.31	100,000 (D876)	.08%	Resistant to some solvents	Resistant to most weak bases	Resistant	Resistant No Discoloration
CLT	**Black Polyethylene** Lowest cost material is for use up to 122°F. Other colors may be available.	-40°F (-40°C) to 122°F (50°C)	HB	—	—	.926 – .940	1500 (D638)	—	Resistant except to halogenated hydrocarbons	Resistant	Resistant	Resistant No Discoloration
GROMMET EDGING	**Natural Polyethylene** Lowest cost material for indoor use up to 122°F. Natural is available in all sizes.	-40°F (-40°C) to 122°F (50°C)	HB	239°F (115°C)	22 mg	.91 – .93	1400 (D638)	—	Resistant below 140°F (60°C) except to chlorinated solvents	Resistant	Resistant except to oxidizing acids	Some Discoloration
	Weather Resistant Polyethylene This material has the same properties as natural polyethylene, and also has additives which allow it to resist the effects of ultraviolet light and acid rain in an outdoor environment. This product is available only.	-40°F (-40°C) to 122°F (50°C)	HB	239°F (115°C)	20 mg	.93 – 1.09	2000 (D638)	.03%	Resistant below 140°F (60°C) except to chlorinated solvents	Resistant	Resistant except to oxidizing acids	No Discoloration
	Flame Retardant Polyethylene UL 94-V0 Rating This material is self extinguishing and passes the UL 94 flame retardant test with a V0 rating.	-40°F (-40°C) to 194°F (90°C)	V-0	270°F (132°C)	22 mg	1.23 – 1.37	1200	.02%	Resistant below 140°F (60°C) except to chlorinated solvents	Resistant	Resistant except to oxidizing acids	Some Discoloration

Note: Typical operating temperature ranges are extended based on end use application and specific environment tests.

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FDDI/CDDI
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FOIRL
TPDDI
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1. Meet all TIA/EIA commercial building wiring standards.
2. *PANDUIT* categorized product must be used in conjunction with an equivalent or higher Category UL or ETL verified cable.
3. *PANDUIT* products must be installed per appropriate *PANDUIT* instruction sheets.

Note: *All networks shall be installed per applicable standards and manufacturer's guidelines.*

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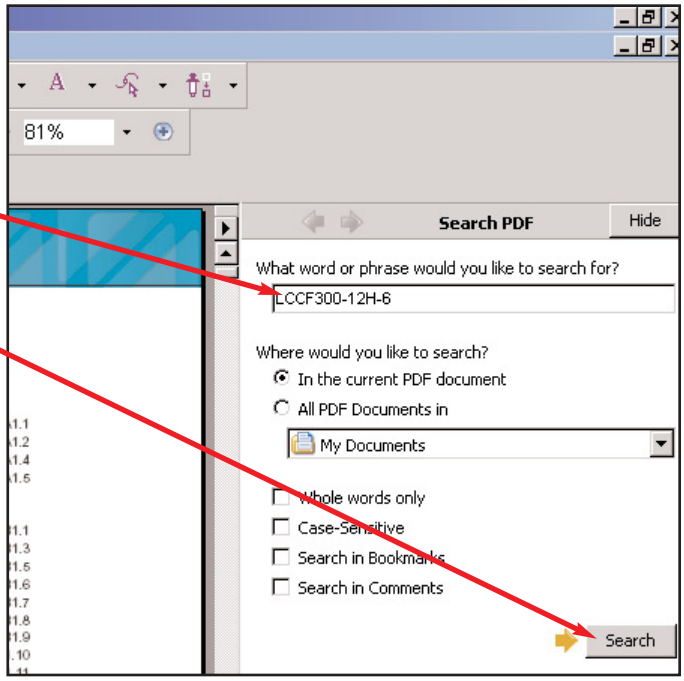
Searching by Part Numbers in this Catalog PDF

1. To search for a Part Number in this Catalog PDF, either press the Control key and the letter F (Ctrl-F) at the same time OR from the menu bar, select Edit, and then select Find/Change.

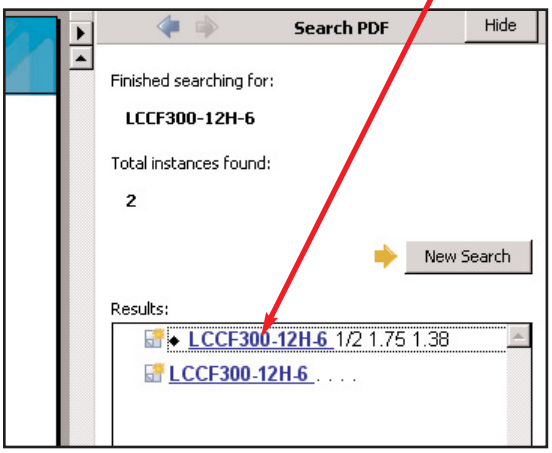
2. The screen will spit into two parts. In the first window on the right side, type in the part number you wish to find. For example, if you wish to find LCCF300-12H-6, type as shown. There is no need to be case sensitive in your typing.

3. When you are done typing, press the "Search" button.

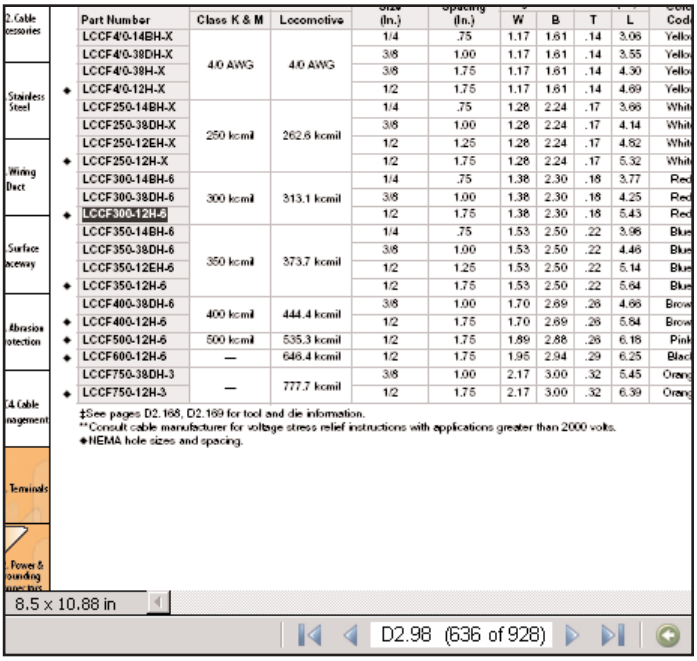
If you want to be less precise in your search, and find all instances of similar part numbers, you could type in just part of the number. For example, if you want to find all the LCCF300 numbers, just type in LCCF300.



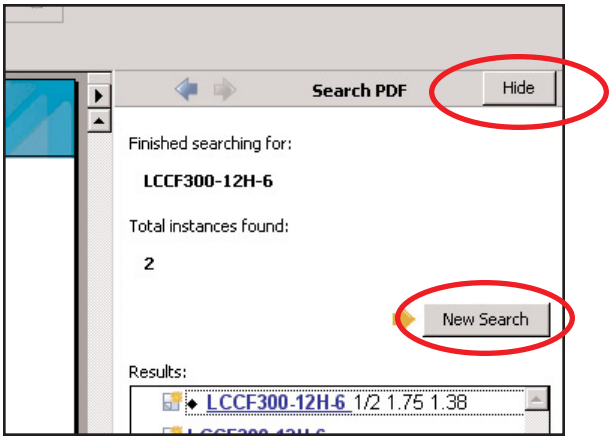
4. The right side of the screen, under "Results", will now display all occurrences of the part number. Select any of the choices to be taken to that page.



5. The left side of your screen will now show the page with the part number, and the part number will be highlighted (see below).



6. To return to a full screen view, select the "Hide" button. To keep the "Search PDF" screen and search for more part numbers, select the "New Search" button (see below).



Note: An alternative is to look in the Part Number Index at the back of this PDF and find the part number manually, then manually scroll to the page indicated.

Click Here to Return to the Table of Contents

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- View with Browser or Reader Application
- Bookmarks: quick, easy table of contents
- Acrobat navigation Next / Previous buttons
- View facing pages
- Acrobat Search options

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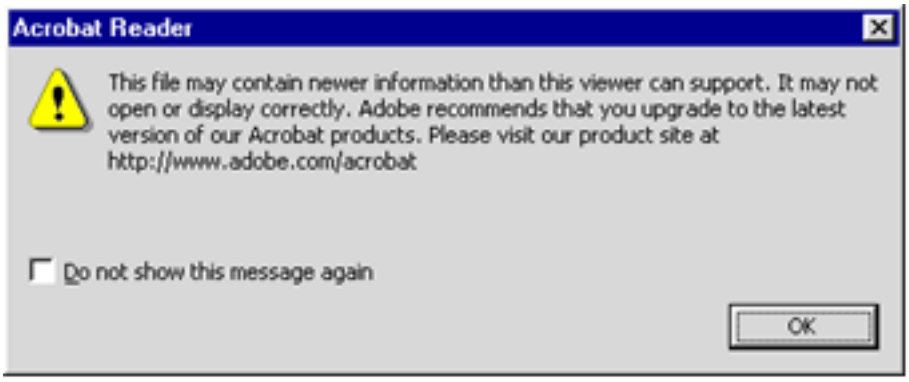
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Acrobat Alert "...may contain newer information than this viewer can support..."

When opening PDF documents on this disc, you may see this alert.



Check the ***Do not show***... box and click OK. PDF files on this disc are formatted to be completely functional with Acrobat Reader version 5 or higher. As long as the PDF file opens, all required features will be available.

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TOP

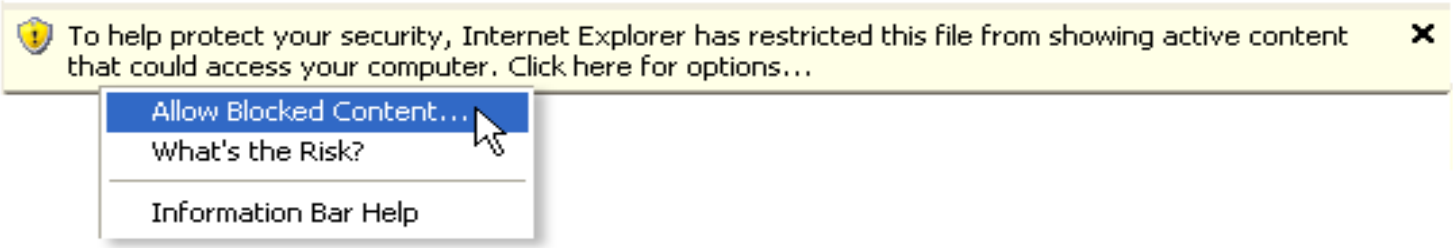
LInks not working (Pop-Up Blockers)

Some links will open a new browser window. If you have a pop-up blocker installed in your browser, it may see new linked windows as pop-ups. Setting the blocker to allow pop-ups from this site (CD) should resolve this problem.

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Links not working / security alerts (Windows XP)

If you have installed Service Pack 2 (SP2) for Windows XP (Home or Professional) you are aware of the very high level of security enforced by the system. It is particularly aggressive in protecting you against "active links". Virtually every file on this CD has active links that allow you to move between pages and open other documents. As a result, some documents may seem to have links that don't work or pages that open blank. If this happens, look at the top of the web page for this alert:



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Adobe Reader Application or Browser Options

When you install Acrobat Reader, it installs both an Application (stand-alone program and a plug-in for your brower program(s). By default it will be configured to open PDF files in your Internet browser. You may setup Acrobat to open documents in either your browser window or to open them in the standard Reader application window.

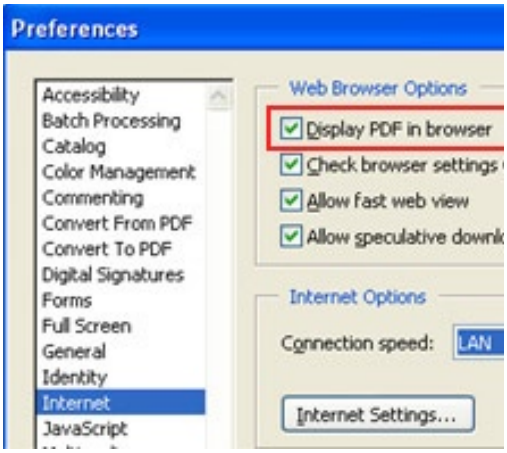
What's the Difference?

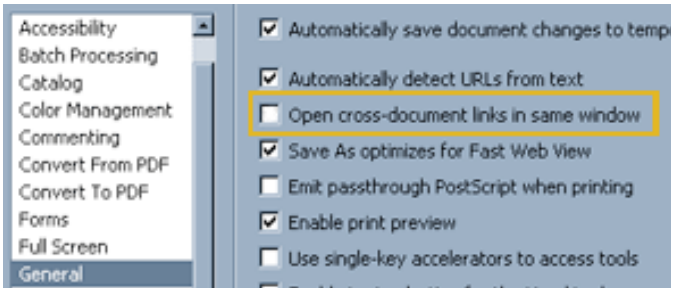
INTERNET BROWSER WINDOW	APPLICATION WINDOW
Can have only one PDF Document open at a time	Can have multiple documents open simultaneously
Search may be limited by support provided at the site of the PDF file	Support for full Search of the site/CD contents
Potential security alert in Windows XP (SP2) everytime you link to an new document	No Security alerts

This option can be easily changed in the Reader application. To open the application window, look for the Adobe icon on your Start menu or Desktop. This option can only be edited within the application. These instructions apply to version 5 through 7.

- Select Edit/Preferences
- From the list in the left pane select Internet
- Check "Display PDF in Browser" to have PDF file open in your Browser; uncheck it to have PDF files open in the Reader application.

TOP





The Reader application offers you the option of having links between documents open to replace the original window or open as a new window. While in the Preferences area of Reader, select the General option in the left pane.

Default (checked) is to have links open in the same window. Uncheck "Open cross-document links in same window" if you prefer to have links open in a new window.

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Bookmarks - Hyper Table of Contents

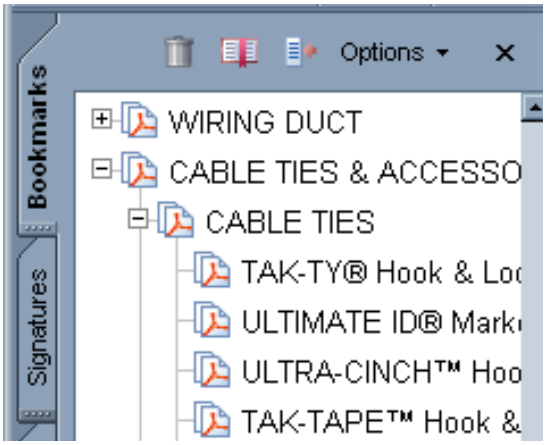
In very large PDF files, Acrobat bookmarks become a much faster and more convenient than searching through massive Table of Content listings.

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Bookmarks contain nested listings so you can locate major catatories, then drill down to specific products types.

Click the "+" or "-" in front of the listing to expand or collapse a category.

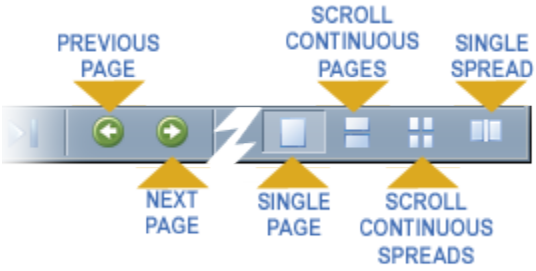
Click on a bookmark link at any level to jump to that specific location.



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Navigation / Page View Options

Acrobat enhances your experience in PDF catalogs with two sets of navigation buttons. The arrow buttons work just like the Next and Previous buttons in a web browser.



Page view buttons allow you to choose to view one page at a time or scroll so you can see portions of the bottom of one page and the top of the next.

Some pages, like Roadmaps in *PANDUIT* catalogs, are best viewed as spreads (side-by-side pages). You can choose this option with the page view buttons.

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USER TIPS / HELP

- Acrobat Alert:"This file may contain newer..."
- Links not working, pop-up blocker
- Windows XP links not working, security alerts
- View with Browser or Reader Application
- Bookmarks: quick, easy table of contents
- Acrobat navigation Next / Previous buttons
- View facing pages
- Acrobat Search options

RETURN TO CATALOG

PROGRAM LINKS

Obtain programs that may be necessary to use content on this disc.

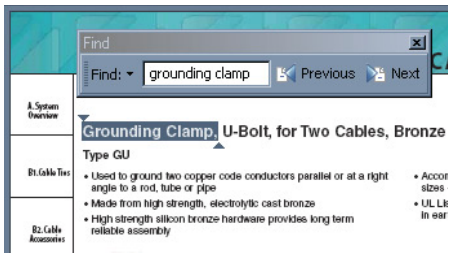
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Using Acrobat Find or Search

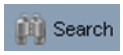
In Acrobat, Find and Search are distinct functions.

- Find scans the currently selected document for matches to your criteria
- Search can be configured to include one or multiple documents on a disc computer or server, then return results that appear in any of those documents.

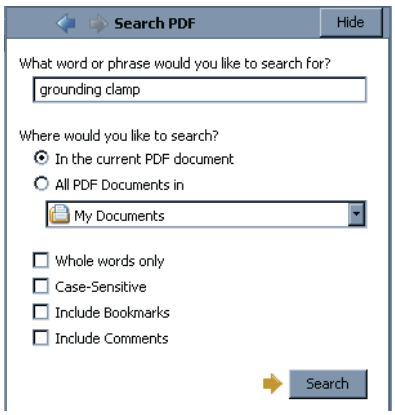
Acrobat Version 6 or 7



Find is accessed with the Ctrl+F key combo (Edit>Find). Type in the search criteria and click Next. If there are matches to your criteria, a page will appear with the results highlighted. Continuing to click Next or Previous changes pages and highlight locations.

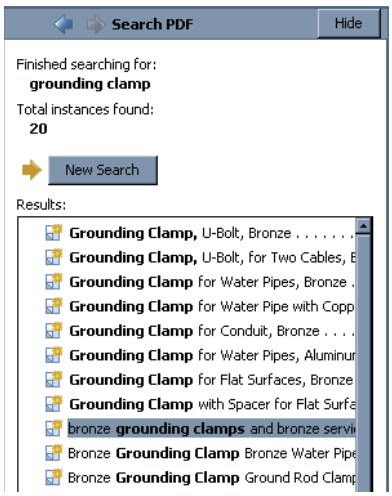
Open **Search** by clicking the binocular button 

(Ctrl+Shift+F). The Search dialog offers the option of selecting locations to be included (1).



Enter your search criteria, click the search button.

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Results will appear as a list. Each item is an active link to that location in the document where it was found. Click a link to jump to that location.

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Optional Installation Programs & Links

PDF files on this optimized for use with Acrobat 5 or higher.

Installing Acrobat / Adobe Reader

If you don't already have Acrobat Reader, it is always recommended that you download the most current version from the Adobe website. Click the logo under Third Party Links (below) to go the the download page. The name of the program was changed from Acrobat Reader to Adobe Reader starting with Version 6.x. The version on this CD is 7.0.5 (U.S. English, Windows only) and is made available for those who do not have ready access to the internet. To install from this disc, browse the CD folders and open Programs.

Installation Cautions

Adobe strongly recommends that only one version of Reader be installed on any computer. Please uninstall previous versions before you install. Uninstalling a previous version after installing a newer one can also delete files required by the newer one.

Free Third Party Links (if needed)

PANDUIT Web sites, CDs and DVDs may contain multimedia programs that require your computer to have one or more of the following programs or plugins installed. Selecting a file or link requiring one of these programs will alert you of the program required. All these programs are free by way of the Internet links below. If you frequent the Internet, you probably already have some or all of these programs installed.

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