IndustrialNet™ Category 6A 600V Patch Cords

specifications

Industrial patch cords shall be constructed of Category 6A, industrial grade, 26 AWG stranded, twisted 4-pair shielded SF/UTP cable with a flame retardant (CMR) thermoplastic elastomer (TPE) jacket. Patch cord cable shall be offered in teal and black colors and lengths for design flexibility. Each patch cord shall be pre-terminated to include Category 6A RJ45 shielded modular plugs on each end, with a black strain relief boot, and wired according to the T568B standard. Each patch cord is designed to support high-flex applications and is rated for 600V panel or on-machine applications when the space is shared with high voltage power cables.

technical information

Electrical/ mechanical performance:	Exceeds channel and component requirements of ANSI/TIA-568-C.2 Category 6A and ISO 11801 Class Ea standards at swept frequencies up to 500MHz; meets ODVA Ethernet/IP electrical and mechanical performance requirements
FCC and ANSI compliance:	Meets all applicable ANSI/TIA-968-A requirements; contacts plated with 50 micro-inches of gold for superior performance
IEC compliance:	Meets IEC 60603-7 UL-rated: UL 1863 approved
IP compliance:	Rated IP20
RoHS compliancy status:	Compliant
PoE compliance:	Meets IEEE 802.3af and IEEE 802.3at for PoE+ applications
Other standard compliances:	UL AWM Style 2463 (80°C 600V) Flex Life Test: 1 million cycles at 10x cable diameter; 10 million cycles at 20x cable diameter Torsion Life Test: 3 million cycles, 360°
Temperature rating:	-10°C to 60°C (14°F to 140°F) operating; -40°C to 70°C (-40°F to 158°F) storage
Wiring scheme:	T568B
Cable jacket diameter:	7.4 mm (0.29 in.) nominal
Flame rating:	CMR (UL1685)
Packaging:	1 unit per polyethylene bag, 10 units per carton

key features and benefits

Robust 600V-rated construction:	Allows for patch runs between automation devices in industrial environments; rated for 600V panel or on-machine applications when the space is shared with high voltage power cables; plug contact plated with 50 micro-inches of gold
100% performance tested for wire map, NEXT, and return loss:	Factory testing provides confidence that each patch cord delivers specified performance
Centered de-embedded plug:	Performs in center of ANSI/TIA-568-C.2 component range, ensuring interoperability and optimum performance
Integral pair manager:	Optimizes performance and consistency by reducing untwist at the plug
Flexible stranded cable:	26 AWG stranded copper cable with a nominal diameter of 7.4mm (0.29 in.) allows for high density applications and superior panel cable management
Identification provides for future traceability:	Identification of performance level, length, and quality control number is provided on each cord

applications

IndustrialNet™ Patch Cords provide an ideal solution to support Industrial Ethernet from the Local Area Network (LAN) based support offices to the processing devices on the plant floor. The industrial Ethernet patch cord is a key component to an overall industrial Ethernet application. The patch cord will be the interface that protects the integrity of the Ethernet data transfer from the switch or PLC out to the devices or up to the horizontal plant backbone. The patch cord incorporates a durable oil and UV resistant TPE jacketed cable with modular plugs and is fully shielded for use in high noise (EMI/RFI) environments.

Key applications include:

• 10BASE-T (Ethernet)
• 100BASE-T (Fast Ethernet)
• 1000BASE-T (Gigabit Ethernet)
• Industrial Ethernet
• Ethernet/IP
• Control Panel deployments featuring power source voltages
• Uplinks featuring gigabit data transmission from the control panel to the consolidation point
• High flex applications – Robotic, C-Track

IndustrialNet™ Category 6A Shielded 600 V-Rated Patch Cords

CM/CMX:	^ISTPH6X1M**

IndustrialNet™ Category 6A SF/UTP Copper Cable

CMR/CMX 4-pair:	ISFCH6X04B**-UG

IndustrialNet™ Category 6/5e RJ45 Field Terminable Plug

Field terminable plug:	ISPS688MFA

IndustrialNet™ M12 X-Code Field Terminable Plug

Field terminable Plug:	ISPS6A88MFA

IndustrialNet™ M12 X-Code to RJ45 Panel Mount Adapter

Panel mount adapter:	ICAM12DRJS

Mini-Com® Modular Patch Panel

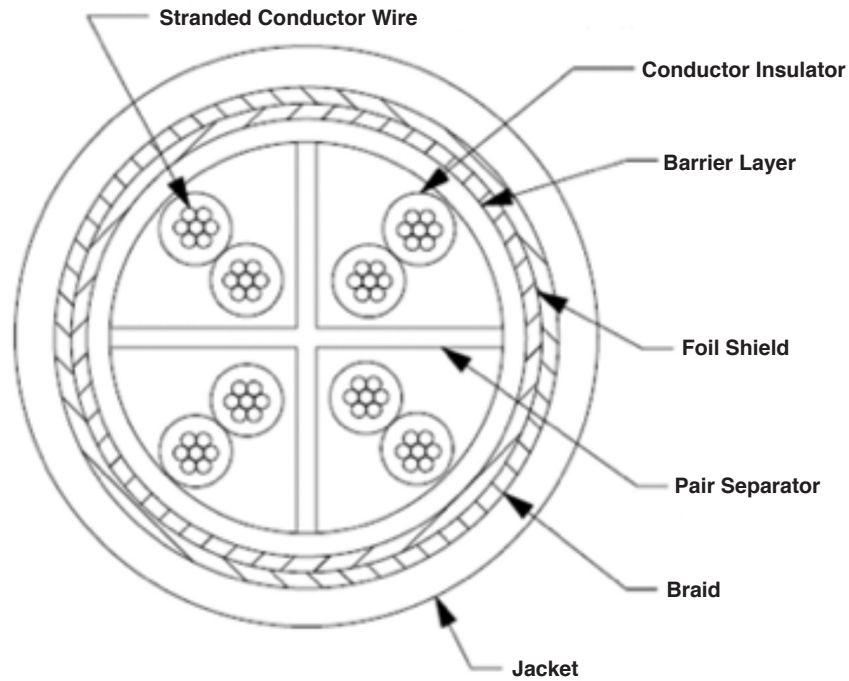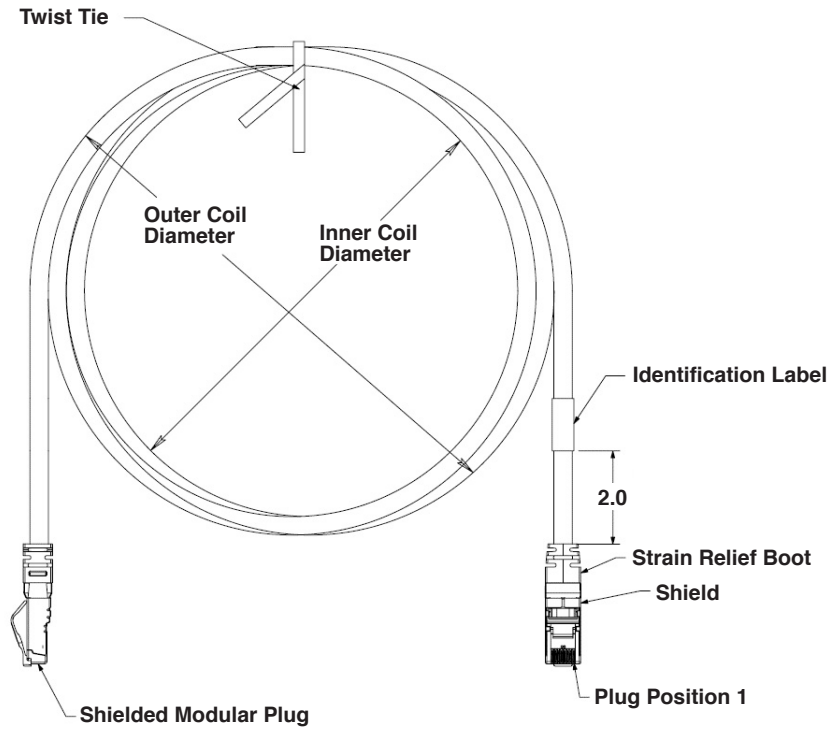|	
8-port:	CDPP8RG

DIN Rail Adapter

1-port:	CADIN1IW***

^For other lengths, change the length in the part number, to the desired length (0.3M, 0.6M, 1M, 1.5M, 2M, 2.5M, 3M, 3.5M, 4M, 4.5M, 5M, 7M, 10M, 15M, or 20M)

**To designate color, add suffix TL (Teal) or BL (Black)

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

IndustrialNet™ Category 6A 600V Patch Cords

Twist Tie

Outer Coil Diameter

Inner Coil Diameter

Identification Label

2.0

Strain Relief Boot

Shield

Plug Position 1

Shielded Modular Plug

Stranded Conductor Wire

Conductor Insulator

Barrier Layer

Foil Shield

Pair Separator

Braid

Jacket

For a copy of Panduit product warranties, log on to www.panduit.com/warranty

For more information

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