

# 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

|                                           |                                                                                                                                                                                                                          |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Electrical/mechanical performance:</b> | 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 |
| <b>FCC and ANSI compliance:</b>           | Meets all applicable ANSI/TIA-968-A requirements; contacts plated with 50 micro-inches of gold for superior performance                                                                                                  |
| <b>IEC compliance:</b>                    | Meets IEC 60603-7 UL-rated: UL 1863 approved                                                                                                                                                                             |
| <b>IP compliance:</b>                     | Rated IP20                                                                                                                                                                                                               |
| <b>RoHS compliancy status:</b>            | Compliant                                                                                                                                                                                                                |
| <b>PoE compliance:</b>                    | Meets IEEE 802.3af and IEEE 802.3at for PoE+ applications                                                                                                                                                                |
| <b>Other standard compliances:</b>        | 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°                                                  |
| <b>Temperature rating:</b>                | -10°C to 60°C (14°F to 140°F) operating;<br>-40°C to 70°C (-40°F to 158°F) storage                                                                                                                                       |
| <b>Wiring scheme:</b>                     | T568B                                                                                                                                                                                                                    |
| <b>Cable jacket diameter:</b>             | 7.4 mm (0.29 in.) nominal                                                                                                                                                                                                |
| <b>Flame rating:</b>                      | CMR (UL1685)                                                                                                                                                                                                             |
| <b>Packaging:</b>                         | 1 unit per polyethylene bag, 10 units per carton                                                                                                                                                                         |

## key features and benefits

|                                                                     |                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Robust 600V-rated construction:</b>                              | 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 |
| <b>100% performance tested for wire map, NEXT, and return loss:</b> | Factory testing provides confidence that each patch cord delivers specified performance                                                                                                                                                |
| <b>Centered de-embedded plug:</b>                                   | Performs in center of ANSI/TIA-568-C.2 component range, ensuring interoperability and optimum performance                                                                                                                              |
| <b>Integral pair manager:</b>                                       | Optimizes performance and consistency by reducing untwist at the plug                                                                                                                                                                  |
| <b>Flexible stranded cable:</b>                                     | 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                                                                                      |
| <b>Identification provides for future traceability:</b>             | 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

# PANDUIT®

## SPECIFICATION SHEET

### 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

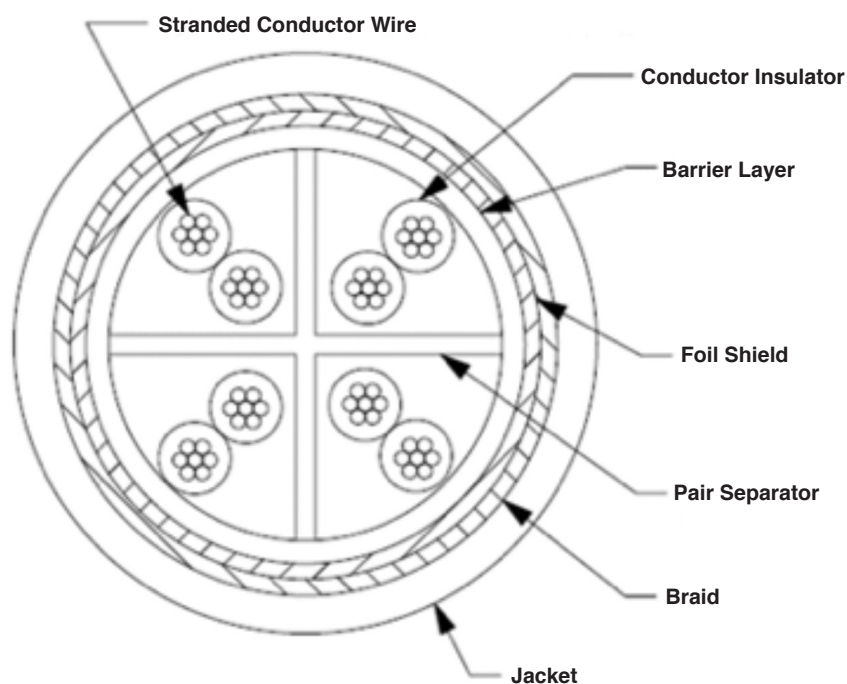
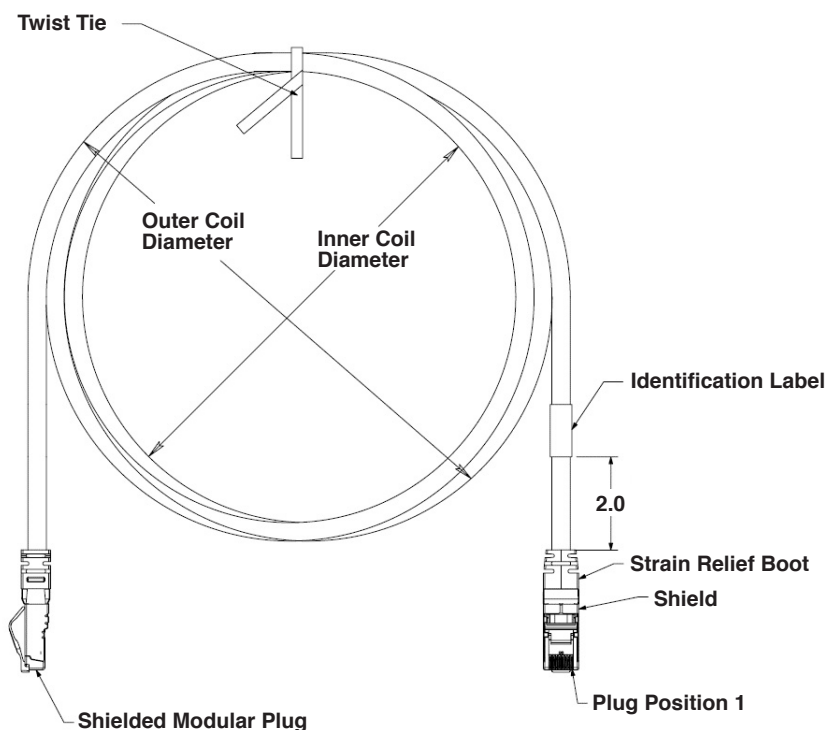
**1-port:** CADIN1IW\*\*\*

^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



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