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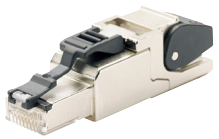
# IndustrialNet™ Category 6A RJ45 Field Terminable Plug

PANDUIT®

SPECIFICATION SHEET

## specifications

8-position, industrial plug shall be applicable for use in manufacturing as well as other industrial environments. The product shall meet or exceed the component requirements of the ANSI/TIA-568-C.2 Category 6 and Category 5e, ISO 11801 Class E and Class D, and ODVA Ethernet/IP^, PROFINET, and CC-Link standards. It shall also meet the channel requirements of ANSI/TIA-568-C.2 Category 6A and ISO 11801 2nd Edition Class $E_A$ in a 4-connector configuration up to 100 meters at swept frequencies up to 500MHz when installed with other Panduit Category 6A components. The RJ45 plug shall be constructed of zinc die cast housing with 360° shielding and shall include a dust cap. The plug shall incorporate an ingress protection rating of IP20 and offer an extended temperature range as required for more demanding applications. The plug shall be capable of termination to either a 2-pair or 4-pair solid or stranded twisted pair copper cable.



## technical information

| | |
|---|---|
| ***Electrical/ mechanical performance:*** | Exceeds channel and patch cord requirements of ANSI/TIA-568-C.2 Category 6 and Category 5e, and ISO 11801 Class E and Class D standards at swept frequencies up to 250MHz and 100MHz respectively and conforms to ODVA Ethernet/IP^, PROFINET and CC-Link electrical and mechanical performance requirements when installed with other Panduit components.<br>Meets the channel requirements of ANSI/TIA-568-C.2 Category 6A and ISO 11801 2nd Edition Class $E_A$ in a 4-connector configuration up to 100 meters at swept frequencies up to 500MHz when installed with other Panduit Category 6A components. |
| ***UL/IEC compliance:*** | Meets UL 1863 and IEC 60603-7-51 |
| ***IP compliance:*** | Rated IP20 |
| ***RoHS compliancy status:*** | Compliant |
| ***PoE compliance:*** | Meets IEEE 802.3af and IEEE 802.3at for PoE applications |
| ***Temperature rating:*** | -40°C to 85°C (-40°F to 185°F) operating and storage |
| ***Wiring scheme:*** | T568A/T568B |
| ***Conductor termination range:*** | ISPS688FA: Solid 24/1-22/1 AWG, 0.020 in.-0.025 in. (0.51mm-0.64mm); Stranded 27/7-22/7 AWG, 0.018 in.-0.030 in. (0.46mm-0.76mm); Stranded 24/19-22/19 AWG, 0.024 in.-0.031 in. (0.61mm-0.78mm)<br>ISPS688FAS: Solid 26/1-24/1 AWG, 0.016 in.-0.020 in. (0.41mm-0.51mm); Stranded 27/7-24/7 AWG, 0.018 in.-0.024 in. (0.46mm-0.61mm); Stranded 26/19 AWG, 0.020 in. (0.51mm) |
| ***Insulation termination range:*** | ISPS688FA: 1.0 – 1.6mm (0.039 – 0.063 in.)<br>ISPS688FAS: 0.85 – 1.0mm (0.033 – 0.039 in.) |
| ***Cable jacket diameter range:*** | 5.0 – 9.0mm (0.197 – 0.354 in.) |
| ***Packaging:*** | 1 unit per PE bag, 10 units per carton |

## key features and benefits

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|---|---|
| ***Robust construction*** | Zinc die cast housing with 360° shielding and full metal shielding between wire pairs; secure data transmission in high noise (EMI/RFI) environments; dust cap protection; three strain relief settings (cable diameters 5.0mm to 9.0mm) |
| ***Field attachable*** | Can be assembled in 60 seconds; Knipex parallel jaw pliers, part number 86 03 250, required |
| ***Extended temperature range*** | -40°C to 85°C (-40°F to 185°F) |

## applications

IndustrialNet™ Category 6A RJ45 Field Terminable Plug provides an ideal solution to support Industrial Ethernet from the Local Area Network (LAN) based support offices to the processing devices on the plant floor, for applications up to and including 10GBASE-T Ethernet. A key component to an overall industrial Ethernet application, the plug is 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.

Constructed of a robust die cast housing and fully shielded, the plug is ideal for use in high noise (EMI/RFI) environments. Field attachable for on-site termination allows quick installation. The extended temperature range -40°C to 85°C (-40°F to 185°F) is ideal for use in more demanding applications such as manufacturing facilities where temperature extremes are the norm.

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***IndustrialNet™ Category 6A/6/5e RJ45 Field Terminable Plug for cables with 1.0-1.6mm (0.039-0.063 in.) insulation diameter***

| | |
|---|---|
| ***Plug:*** | ISPS688FA |
| ***Replacement wire manager:*** | ISPS688FA-WM |

***IndustrialNet™ Category 6A/6/5e RJ45 Field Terminable Plug for cables with 0.85-1.0mm (0.033-0.039 in.) insulation diameter***

| | |
|---|---|
| ***Plug:*** | ISPS688FAS |
| ***Replacement wire manager:*** | ISPS688FAS-WM |

***IndustrialNet™ Category 5e SF/UTP Copper Cable***

| | |
|---|---|
| ***CM*** | |
| ***2-pair:*** | ISFCH5C02A*-XG |
| ***4-pair:*** | ISFCH5C04A*-XG |
| ***Flame retardant, halogen-free*** | |
| ***2-pair/color Teal:*** | ISFX5502ATL-LED |
| ***2-pair/color Red:*** | ISFX5502ARD-LED |

***IndustrialNet™ Category 5e F/UTP Copper Cable***

***CM 4-pair/color Black:*** IFC5C04BBL-CEG

***IndustrialNet™ Category 5e U/UTP Copper Cable***

***CM 4-pair/color Black:*** IUC5C04ABL-CEG

***IndustrialNet™ Category 6 F/UTP Copper Cable***

***CM 4-pair/color Black:*** IFC6C04BBL-CEG

***IndustrialNet™ Category 6 U/UTP Copper Cable***

***CM 4-pair/color Black:*** IUC6C04ABL-CEG

***IndustrialNet™ Category 6 S/FTP Copper Cable***

| | |
|---|---|
| ***Flame retardant, halogen-free*** | |
| ***4-pair/color Yellow:*** | ISX6004AYL-LED |
| ***4-pair/color Red:*** | ISX6004ARD-LED |

***IndustrialNet™ M12 D-Code Field Terminable Plug***

| | |
|---|---|
| ***Field terminable plug:*** | ISPS5E44MFA |

***IndustrialNet™ Category 5e Shielded 600 V-Rated Patch Cords***

| | |
|---|---|
| ***CM/CMX outdoor:*** | **ISTPHCH1MTL |

***IndustrialNet™ M12 D-Code to RJ45 Panel Mount Adapter***

***Panel mount adapter:*** ICAM12DRJS

***Mini-Com® Modular Patch Panel***

| | |
|---|---|
| ***8-port:*** | CDPP8RG |

***DIN Rail Adapter***

| | |
|---|---|
| ***1-port:*** | CADIN1IW*** |

***Tools and Accessories***

| | |
|---|---|
| ***Wire map termination tool:*** | Knipex 86 03 250 10" pliers |
| ***Jack module termination tool:*** | EGJT or TGJT |
| ***Wire snipping tool:*** | CWST |
| ***Wire stripping tool:*** | CJAST |
| ***Clear dust cap:*** | MDC-C |
| ***Block out device:*** | PSL-DCJB^^ |
| ***Phone icons:*** | CIPIW-C+ |
| ***Data icons:*** | CIDIW-C+ |

* To designate color, add suffix TL (Teal), BL (Black), RD (Red), BU (Blue) GY (Gray), or YL (Yellow).

** For other lengths, change the length designation (1M) of the part number to the desired length (0.3M, 0.6M, 2M, 3M, 5M, or 10M); to designate color, replace TL (Teal) suffix with BL (Black), RD (Red), or YL (Yellow). For example, the part number of a 2-meter teal patch cord is ISTPHCH2MTL.

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

^ EtherNet/IP is a trademark of ODVA.

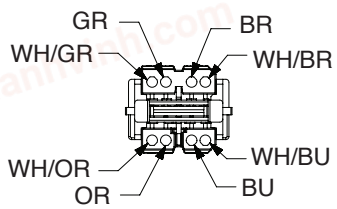
^^ To designate color other than Red, add suffix BL (Black), BU (Blue), YL (Yellow), GR (Green), OR (Orange), IW (Off White) or IG (International Gray) at the end of the part number. 10/package.

+ To designate color other than IW (Off White), replace IW with EI (Electric Ivory), IG (International Gray), BL (Black), BU (Blue), RD (Red), YL (Yellow), GR (Green), OR (Orange), or VL (Violet) in the part number. 100/package.

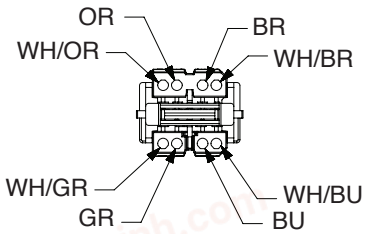
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# IndustrialNet™ Category 6A RJ45 Field Terminable Plug

**Pin Assignment T568A**
**According to TIA/EIA-568-C.2**




**Pin Assignment T568B**
**According to TIA/EIA-568-C.2**



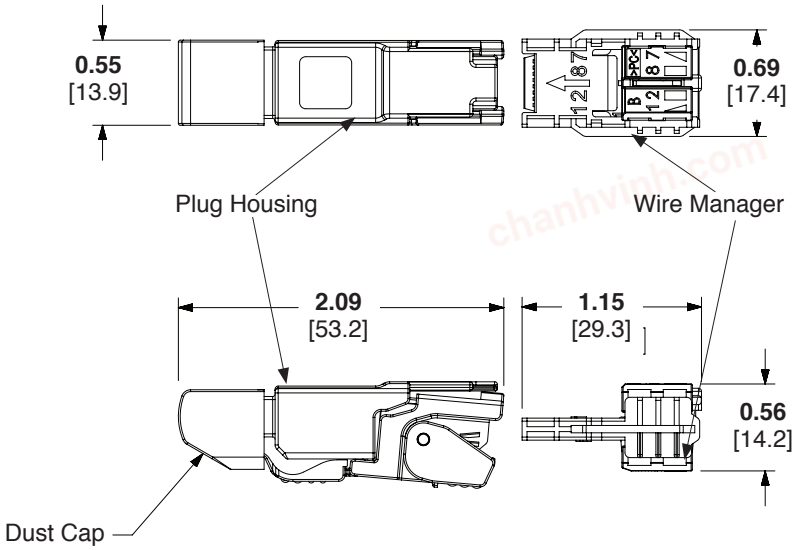
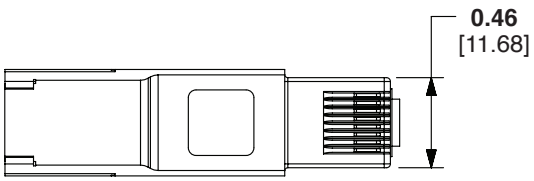
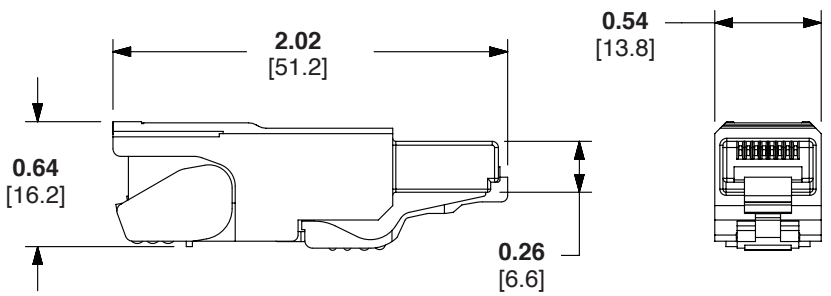




**Figure Shown**
**Dust Cap in Place**



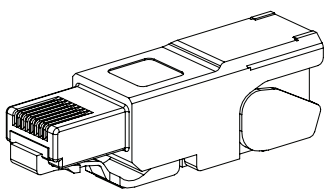



**Figure Shown**
**Dust Cap Removed**

Dimensions are in inches. [Dimensions in brackets are metric.]


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