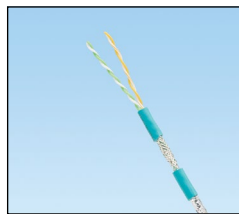


IndustrialNet™ Category 5e SF/UTP Copper Cable

specifications

Category 5e 2-pair SF/UTP copper cable shall meet or exceed the IEC 61156-6, ANSI/TIA-568-C.2 Category 5e and ODVA EtherNet/IP standards up to 80 meters. The stranded copper conductors shall be 24/7 AWG with high density polyethylene (HDPE) insulation. The copper conductors shall be twisted in pairs and wrapped with a foam polypropylene tape to form a core. Both pairs shall then be surrounded by an overall braided shield and metallic foil and covered with a thermoplastic elastomer (TPE) jacket. The jacket shall be oil, sunlight, weld splatter, and abrasion resistant for enhanced chemical resistance and mechanical performance. The jacket shall be flame retardant (CMX/CM) for industrial Ethernet applications. This cable is designed to support high-flex applications and is rated for panel or on-machine applications when the space is shared with 600V high voltage power cables.



technical information

Electrical performance:	Certified component performance up to 80 meters and exceeds the requirements IEC 61156-6 Category 5e, ANSI/TIA-568-C.2 Category 5e, and ODVA EtherNet/IP standards at swept frequencies up to 100 MHz
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° Oil resistance 6 months @ 20°C
Conductors/insulators:	Two pairs of 24/7 AWG stranded copper insulated with high density polyethylene (HDPE)
Insulation diameter:	1.15 – 1.25mm (0.045 – 0.049 in.)
Flame rating:	CMX/CM (UL1685)
Installation tension:	110 N (25 lbf) maximum
Temperature rating:	-40°C to 80°C (-40°F to 176°F) during transport, installation and operation
Cable jacket:	Thermoplastic elastomer (TPE), oil, sunlight, weld splatter, and abrasion resistant
Cable jacket diameter:	6.1mm (0.241 in.) nominal
Cable weight:	13 kg/305m (30 lbs./1000 ft.)
Packaging:	Packaged 305 meters (1000 feet) on a reel Package tested to ISTA Procedure 1A

key features and benefits

Third party tested	Cable has been tested by an independent laboratory and complies with the electrical standard requirements of IEC 61156-6 Category 5e and ANSI/TIA-568-C.2 Category 5e standards
Reliability	Shielded SF/UTP cable construction protects against environmental elements that can cause electrical performance failures; stranded conductors for high flex applications and ease of installation; cable jacket shall be oil, sunlight, weld splatter, and abrasion resistant for enhanced chemical resistance and mechanical performance
High flex applications	Life cycle tested for robotic and c-track use
600V on-machine applications	Rated for panel or on-machine applications when the space is shared with 600V high voltage power cables
Ethernet/IP compliant	Enhanced design to provide performance levels required to support industrial network applications; meets ODVA Ethernet/IP performance requirements
Descending length cable markings	Easy identification of remaining cable reduces installation time and cable scrap
Packaged on a reel	Ensures proper performance and provides quick installation

applications

IndustrialNet™ Category 5e SF/UTP Copper Cable provides reliability and high performance as an integral component of the end-to-end solution for industrial Ethernet and Ethernet/IP based communications networks. The 2-pair high performance cable ensures highest availability in conditions seen in industrial environments. The cable incorporates a durable oil and UV resistant TPE jacket meeting Appliance Wiring Material requirements and rated for panel or on-machine applications when the space is shared with 600V high voltage power cables.

Key applications include:

- 10BASE-T (Ethernet)
- 100BASE-T (Fast Ethernet)
- Industrial Ethernet
- Ethernet/IP
- Control Panel deployments featuring power source voltages
- Downlinks from control panel to the machine area
- High flex applications – robotic, c-track

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SPECIFICATION SHEET

IndustrialNet™ Category 5e SF/UTP Copper Cable

CM/CMX
2-pair: ISFCH5C02A*-XG

IndustrialNet™ Category 6/5e RJ45 Field Terminable Plug

Field terminable plug: ISPS688FA

IndustrialNet™ M12 D-Code Field Terminable Plug

Field terminable plug: ISPS5E44MFA

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

CM/CMX: **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***

*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 for 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).

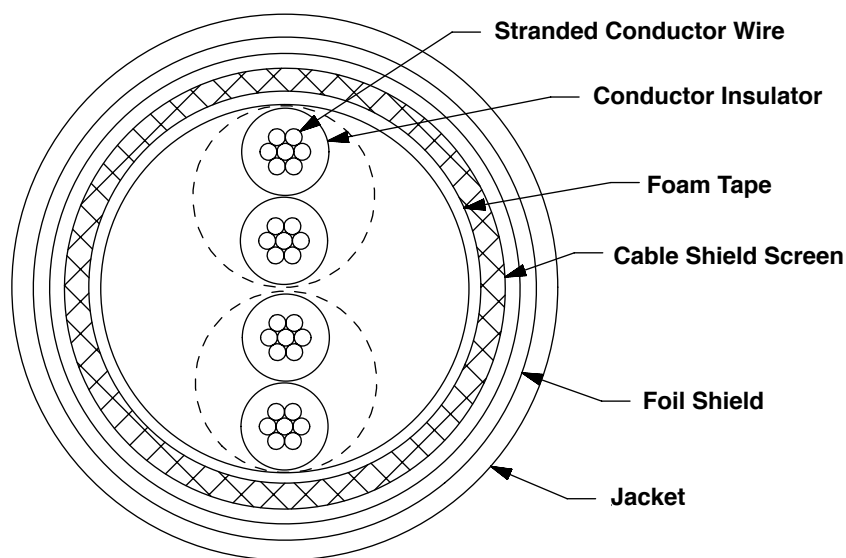
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IndustrialNet™ Category 5e SF/UTP Copper Cable

additional specifications

Mechanical Test	
Ultimate Breaking Strength	>400 N (90 lbf.)
Minimum Bend Radius	2x cable diameter
Electrical Test	
Nominal Velocity of Propagation (NVP)	68%
Operating Voltage, Maximum	80V

cable construction



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IndustrialNet™ Category 5e SF/UTP Copper Cable

specifications

Category 5e 4-pair SF/UTP copper cable shall meet or exceed the IEC 61156-6, ANSI/TIA-568-C.2 Category 5e and ODVA Ethernet/IP standards up to 80 meters. The stranded copper conductors shall be 24/7 AWG with high density polyethylene (HDPE) insulation. The copper conductors shall be twisted in pairs and wrapped with a foam polypropylene tape to form a core. All pairs shall then be surrounded by an overall braided shield and metallic foil and covered with a thermoplastic elastomer (TPE) jacket. The jacket shall be oil, UV, weld splatter, and abrasion resistant for enhanced chemical resistance and mechanical performance. The jacket shall be flame retardant (CMX/CM) for Industrial Ethernet applications. This cable shall support high-flex applications and be rated for panel or on-machine applications where space is shared with 600V high voltage cables.



technical information

Electrical performance:	Certified component performance up to 80 meters and exceeds the requirements IEC 61156-6 Category 5e, ANSI/TIA-568-C.2 Category 5e and ODVA Ethernet/IP standards at swept frequencies up to 100 MHz
Standard compliances:	UL AWM Style 2463 (80°C 600V) Flex Life Test: 1 million cycles at 10 x cable diameter; 10 million cycles at 20x cable diameter Torsion Life Test: 3 million cycles, 360° Oil resistance 6 months @ 20°C
Conductors/insulators:	Four pairs of 24/7 AWG stranded copper insulated with high density polyethylene (HDPE) insulation
Insulation diameter:	1.12 – 1.22mm (0.044 – 0.048 in.)
Flame rating:	CMX/CM (UL1685)
Installation tension:	110 N (25 lbf) maximum
Temperature rating:	-40°C to 80°C (-40°F to 176°F) during transport, installation, and operation
Cable jacket:	Thermoplastic elastomer (TPE), oil, sunlight, weld splatter, and abrasion resistant
Cable diameter:	7.2mm (0.285 in.) nominal
Cable weight:	18 kg/305m (40 lbs./1000 ft.)
Packaging:	Packaged 305 meters (1000 feet) on a reel Package tested to ISTA Procedure 1A

key features and benefits

Third party tested	Cable has been tested by an independent laboratory and complies with the electrical standard requirements of IEC 61156-6 Category 5e and ANSI/TIA-568-C.2 Category 5e standards
Reliability	Shielded SF/UTP cable construction protects against environmental elements that can cause electrical performance failures; stranded conductors for high flex applications and ease of installation; cable jacket is oil, sunlight, weld splatter, and abrasion resistant for enhanced chemical resistance and mechanical performance
High flex applications	Life cycle tested for robotic and c-track use
600V on-machine applications	Rated for panel or on-machine applications when the space is shared with 600V high voltage power cables
Ethernet/IP compliant	Enhanced design to provide performance levels required to support industrial network applications; meets ODVA Ethernet/IP performance requirements

applications

IndustrialNet™ Category 5e SF/UTP Copper Cable provides reliability and high performance as an integral component of the end-to-end solution for industrial Ethernet and Ethernet/IP based communications networks. The 4-pair high performance cable ensures highest availability in conditions seen in industrial environments. The cable incorporates a durable oil and UV resistant TPE jacket meeting Appliance Wiring Material requirements and rated for panel or on-machine applications when the space is shared with 600V high voltage power cables.

Key applications include:

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

IndustrialNet™ Category 5e SF/UTP Copper Cable

CMX/CM
4-pair: ISFCH5C04A*-XG

IndustrialNet™ Category 6/5e RJ45 Field Terminable Plug

Field
terminable plug: ISPS688FA

IndustrialNet™ Category 5e Shielded 600V Rated Patch Cords

CM/CMX: **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***

*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 for a 2-meter teal patch cord is ISTPHCH2MTL.

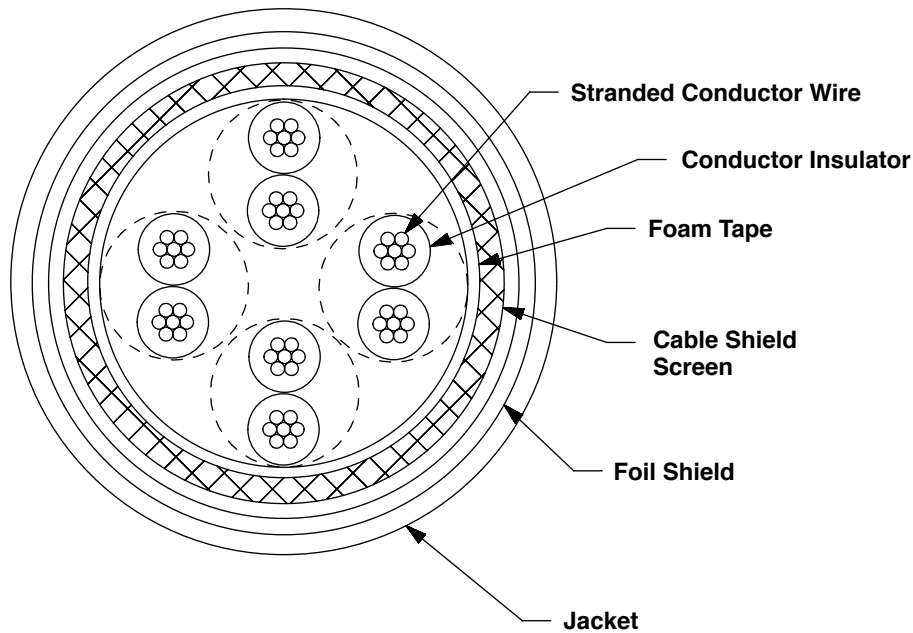
*** For standard colors other than Off White, replace IW in part number with BL (Black), EI (Electric Ivory), IG (International Gray), or WH (White).

IndustrialNet™ Category 5e SF/UTP Copper Cable

additional specifications

Mechanical Test	
Ultimate Breaking Strength	>400 N (90 lbf.)
Minimum Bend Radius	2x cable diameter
Electrical Test	
Nominal Velocity of Propagation (NVP)	68%
Operating Voltage, Maximum	80V

cable construction



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COSP347--WW-ENG
1/2016

IndustrialNet™ Category 5e SF/UTP Copper Cable

specifications

Category 5e 2-pair SF/UTP copper cable shall meet or exceed the IEC 61156-6, ANSI/TIA-568-C.2 Category 5e and ODVA EtherNet/IP standards up to 80 meters. The stranded copper conductors shall be 24/7 AWG with foamed polyethylene (PE) insulation. The copper conductors shall be twisted in pairs. Both pairs shall then be surrounded by an overall metallic foil and braided shield and covered with a polyurethane (PUR) jacket. The jacket shall be oil, ozone, and abrasion resistant for enhanced chemical resistance and mechanical performance. The jacket shall be flame retardant and halogen-free for industrial Ethernet applications. The cable shall support high flex and torsion applications.



technical information

Electrical performance:	Certified component performance up to 80 meters and exceeds the requirements IEC 61156-6 and ANSI/TIA-568-C.2 Category 5e and ODVA EtherNet/IP standards at swept frequencies up to 100 MHz
Standard compliances:	Flexure IEC 61935-2 Flex Life Test: 1 million cycles at 10x cable diameter; 10 million cycles at 20x cable diameter Torsion Life Test: 3 million cycles, 360° Ozone resistance VDE 0472-805 Oil resistance EN 60811-2-1 (7 days x 24hrs/90°C)
Conductors/insulators:	Two pairs of 24/7 AWG stranded copper insulated with foamed polyethylene
Insulation diameter:	1.15 – 1.25mm (0.045 – 0.049 in.)
Flame rating:	Flame retardant, halogen-free – IEC 60332-1-2, IEC 60754-1; EN50575: Euroclass Eca
Installation tension:	80 N (18 lbf) maximum
Temperature rating:	-40°C to 80°C (-40°F to 167°F) during transport, installation, and operation
Cable jacket:	Polyurethane (PUR), oil, ozone, and abrasion resistant
Cable diameter:	6.4mm (0.252 in.) nominal
Cable weight:	22.5 kg/500m (50 lbs./1640 ft.)
Packaging:	Packaged 500 meters (1640 feet) on a reel Package tested to ISTA Procedure 1A

key features and benefits

Third party tested	Cable has been tested by an independent laboratory and complies with the electrical standard requirements of IEC 61156-6 Category 5e and ANSI/TIA-568-C.2 Category 5e standards
Reliability	Shielded SF/UTP cable construction protects against environmental elements that can cause electrical performance failures; stranded conductors for standard flex applications and ease of installation; cable jacket shall be oil, ozone, and abrasion resistant for enhanced chemical resistance and mechanical performance
Ethernet/IP Compliant	Enhanced design to provide performance levels required to support industrial network applications; meets ODVA Ethernet/IP performance requirements
Descending length cable markings	Easy identification of remaining cable reduces installation time and cable scrap
Packaged on a reel	Ensures proper performance and provides quick installation

applications

IndustrialNet™ Category 5e SF/UTP Copper Cable provides reliability and high performance as an integral component of the end-to-end solution for industrial Ethernet and Ethernet/IP based communications networks. The 2-pair high performance cable ensures highest availability in conditions seen in industrial environments. The cable incorporates a durable PUR jacket for use in installations requiring cable with a halogen-free rating.

Key applications include:

- 10BASE-T (Ethernet)
- 100BASE-T (Fast Ethernet)
- Industrial Ethernet
- Ethernet/IP
- Downlinks from control panel to the machine area
- Industrial deployments requiring protection against moisture ingress

IndustrialNet™ Category 5e SF/UTP Copper Cable

Flame retardant, halogen-free
2-pair: ISFX5502A*-LED

IndustrialNet™ Category 6/5e RJ45 Field Terminable Plug

Field terminable plug: ISPS688FA

IndustrialNet™ M12 D-Code Field Terminable Plug

Field terminable plug: ISPS5E44MFA

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

CM/CMX: **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***

*To designate color, add suffix TL (Teal) or RD (Red).

**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 for a 2-meter teal patch cord is ISTPHCH2MTL.

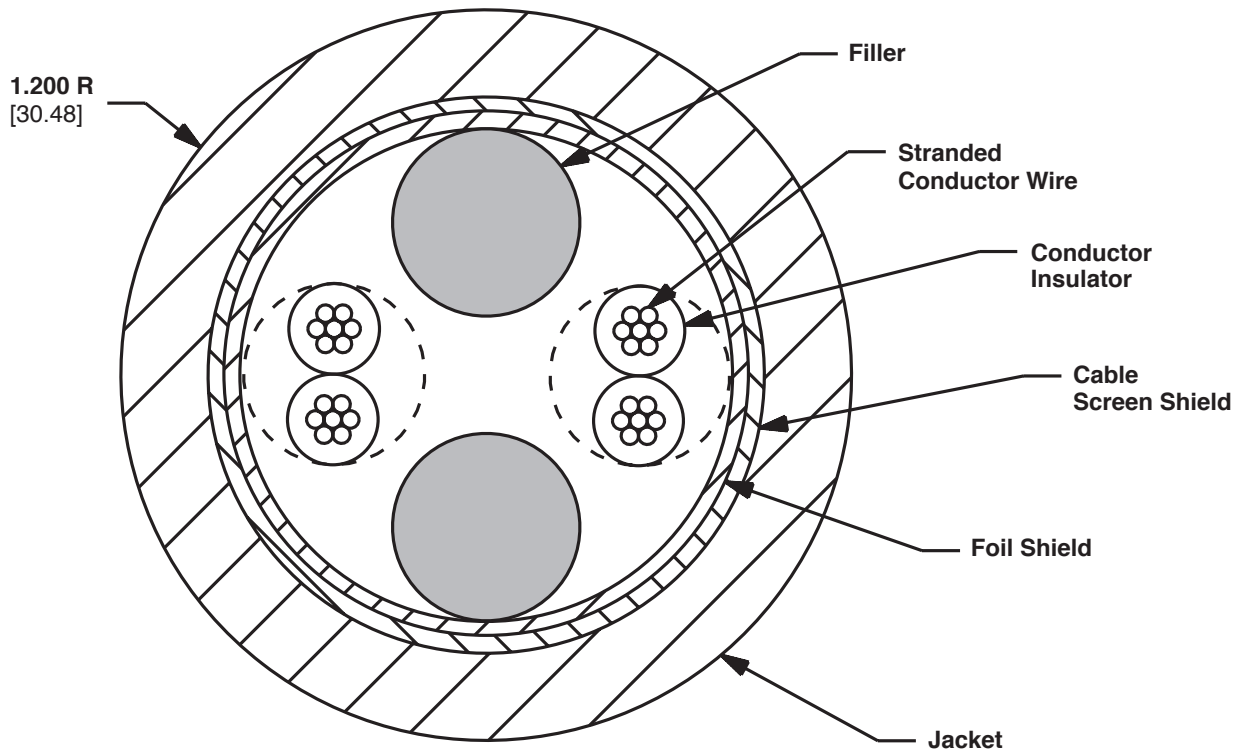
***For standard colors other than Off White, replace IW in part number with BL (Black), EI (Electric Ivory), IG (International Gray), or WH (White).

IndustrialNet™ Category 5e SF/UTP Copper Cable

additional specifications

Mechanical Test	
Ultimate Breaking Strength	>400 N (90 lbf.)
Minimum Bend Radius	8x cable diameter
Electrical Test	
Nominal Velocity of Propagation (NVP)	72%
Operating Voltage, Maximum	80V

cable construction



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

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IndustrialNet™ Category 6 S/FTP Copper Cable

specifications

Category 6 S/FTP copper cable shall meet or exceed the IEC 61156-6 and ANSI/TIA-568-C.2 Category 6 standards up to 80 meters. The stranded copper conductors shall be 24/7 AWG with foamed polyethylene (PE) insulation. The copper conductors shall be twisted in pairs. Each of the four pairs shall be surrounded by an overall metallic foil. All four pairs shall then be surrounded by an overall braided shield and covered with a polyurethane (PUR) jacket. The jacket shall be oil, ozone, and abrasion resistant for enhanced chemical resistance and mechanical performance. The jacket shall be flame retardant and halogen-free for industrial Ethernet applications. The cable shall support high flex and torsion applications.



technical information

Electrical performance:	Certified component performance up to 80 meters and exceeds the requirements IEC 61156-6 and ANSI/TIA-568-C.2 Category 6 at swept frequencies up to 250 MHz
Standard compliances:	Flexure IEC 61935-2 Flex Life Test: 1 million cycles at 10x cable diameter; 10 million cycles at 20x cable diameter Torsion Life Test: 3 million cycles, 360° Ozone resistance VDE 0805 Oil resistance EN 60811-2-1 (7 days x 24hrs/90°C)
Conductors/insulators:	Four pairs of 24/7 AWG stranded copper insulated with foamed polyethylene
Insulation diameter:	1.38 – 1.48mm (0.054 – 0.058 in.)
Flame rating:	Flame retardant, halogen-free – IEC 60332-1-2, IEC 60754-1
Installation tension:	80 N (18 lbf) maximum
Temperature rating:	-40°C to 80°C (-40°F to 167°F) during transport, installation, and operation
Cable jacket:	Polyurethane (PUR), oil, ozone, and abrasion resistant
Cable diameter:	8.0mm (0.315 in.) nominal
Cable weight:	30 kg/500m (66 lbs /1640 ft.)
Packaging:	Packaged 500 meters (1640 feet) on a reel Package tested to ISTA Procedure 1A

key features and benefits

Third party tested	Cable has been tested by an independent laboratory and complies with the electrical standard requirements of IEC 61156-6 and ANSI/TIA-568-C.2 Category 6 standards
Reliability	Shielded S/FTP cable construction protects against environmental elements that can cause electrical performance failures; stranded conductors for standard flex applications and ease of installation; cable jacket shall be oil, ozone, and abrasion resistant for enhanced chemical resistance and mechanical performance
Descending length cable markings	Easy identification of remaining cable reduces installation time and cable scrap
Packaged on a reel	Ensures proper performance and provides quick installation

applications

IndustrialNet™ Category 6 S/FTP Copper Cable provides reliability and high performance as an integral component of the end-to-end solution for industrial Ethernet and Ethernet/IP based communications networks. The 4-pair high performance cable ensures highest availability in conditions seen in industrial environments. The cable incorporates a durable PUR jacket for use in installations requiring cable with a halogen-free rating.

Key applications include:

- 10BASE-T (Ethernet)
- 100BASE-T (Fast Ethernet)
- 1000BASE-T (Gigabit Ethernet)
- Industrial Ethernet
- Ethernet/IP
- Downlinks from control panel to the machine area
- Uplinks featuring gigabit data transmission from the control panel to the consolidation point

IndustrialNet™ Category 6 S/FTP Copper Cable

**Flame retardant, halogen-free
4-pair:** ISX6004A*-LED

IndustrialNet™ Category 6/5e RJ45 Field Terminable Plug

**Field
terminable plug:** ISPS688FA

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

CM/CMX: **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***

*To designate color, add suffix YL (Yellow), or RD (Red).

**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 for a 2-meter teal patch cord is ISTPHCH2MTL.

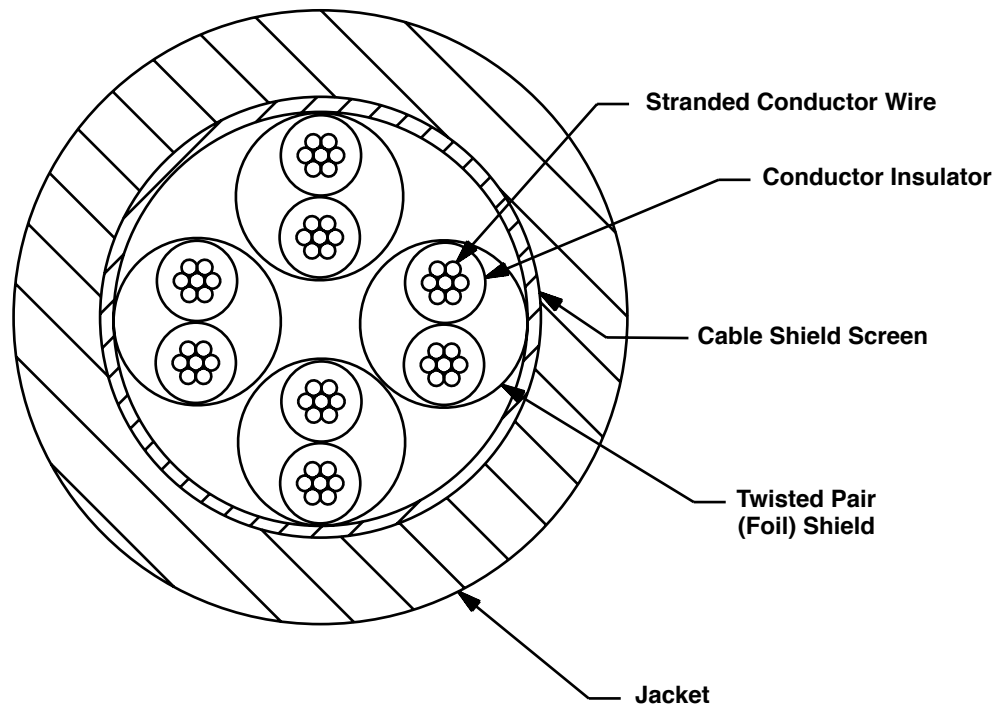
***For standard colors other than Off White, replace IW in part number with BL (Black), EI (Electric Ivory), IG (International Gray), or WH (White).

IndustrialNet™ Category 6 S/FTP Copper Cable

additional specifications

Mechanical Test	
Ultimate Breaking Strength	>400 N (90 lbf.)
Minimum Bend Radius	8x cable diameter
Electrical Test	
Nominal Velocity of Propagation (NVP)	74%
Operating Voltage, Maximum	80V

cable construction



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IndustrialNet™ Category 6A S/FTP Copper Cable

specifications

Category 6A S/FTP copper cable shall meet or exceed the IEC 61156-6 and ANSI/TIA-568-C.2 Category 6A standards up to 80 meters. The stranded copper conductors shall be 24/7 AWG with foamed polyethylene (PE) insulation. The copper conductors shall be twisted in pairs. Each of the four pairs shall be surrounded by an overall metallic foil. All four pairs shall then be surrounded by an overall braided shield and covered with a polyurethane (PUR) jacket. The jacket shall be oil, ozone, and abrasion resistant for enhanced chemical resistance and mechanical performance. The jacket shall be flame retardant and halogen-free for industrial Ethernet applications. The cable shall support high flex and torsion applications.



technical information

Electrical performance:	Certified component performance up to 80 meters and exceeds the requirements IEC 61156-6 and ANSI/TIA-568-C.2 Category 6A at swept frequencies up to 500 MHz
Standard compliances:	Flexure IEC 61935-2 Flex Life Test: 1 million cycles at 10x cable diameter; 10 million cycles at 20x cable diameter Torsion Life Test: 3 million cycles, 360° Ozone resistance VDE 0805 Oil resistance EN 60811-2-1 (7 days x 24hrs/90°C)
Conductors/insulators:	Four pairs of 24/7 AWG stranded copper insulated with foamed polyethylene
Insulation diameter:	1.38 – 1.48mm (0.054 – 0.058 in.)
Flame rating:	Flame retardant, halogen-free – IEC 60332-1, IEC 60754-1 and -2, IEC 61034-2, EN50575: Eurclass Eca
Installation tension:	80 N (18 lbf) maximum
Temperature rating:	-40°C to 80°C (-40°F to 167°F) during transport, installation, and operation
Cable jacket:	Polyurethane (PUR), oil, ozone, and abrasion resistant
Cable diameter:	8.0mm (0.315 in.) nominal
Cable weight:	30 kg/500m (66 lbs /1640 ft.)
Packaging:	Packaged 500 meters (1640 feet) on a reel Package tested to ISTA Procedure 1A

key features and benefits

Third party tested	Cable has been tested by an independent laboratory and complies with the electrical standard requirements of IEC 61156-6 and ANSI/TIA-568-C.2 Category 6A standards
Reliability	Shielded S/FTP cable construction protects against environmental elements that can cause electrical performance failures; stranded conductors for standard flex applications and ease of installation; cable jacket shall be oil, ozone, and abrasion resistant for enhanced chemical resistance and mechanical performance
Descending length cable markings	Easy identification of remaining cable reduces installation time and cable scrap
Packaged on a reel	Ensures proper performance and provides quick installation

applications

IndustrialNet™ Category 6A S/FTP Copper Cable provides reliability and high performance as an integral component of the end-to-end solution for industrial Ethernet based communications networks. The 4-pair high performance cable ensures highest availability in conditions seen in industrial environments. The cable incorporates a durable PUR jacket for use in installations requiring cable with a halogen-free rating.

Key applications include:

- 10BASE-T (Ethernet)
- 100BASE-T (Fast Ethernet)
- 1000BASE-T (Gigabit Ethernet)
- 10GBASE-T (Gigabit Ethernet)
- Industrial Ethernet
- Downlinks from control panel to the machine area
- Uplinks featuring gigabit data transmission from the control panel to the consolidation point

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

**Flame retardant, halogen-free
4-pair:** ISX6X04A**- UG

**IndustrialNet™ Category 6A
RJ45 Field Terminable Plug**

**Field
terminable plug:** ISPS688FA

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

Straight: ICAM12XRJS
90 degree angle: ICAM12X90RJS

Mini-Com® Modular Patch Panel

8-port: CDPP8RG

DIN Rail Adapter

1-port: CADIN1IW***

**To designate color, add suffix YL (Yellow), IG (International Gray), BU (Blue), TL (Teal), OR (Orange) or RD (Red).

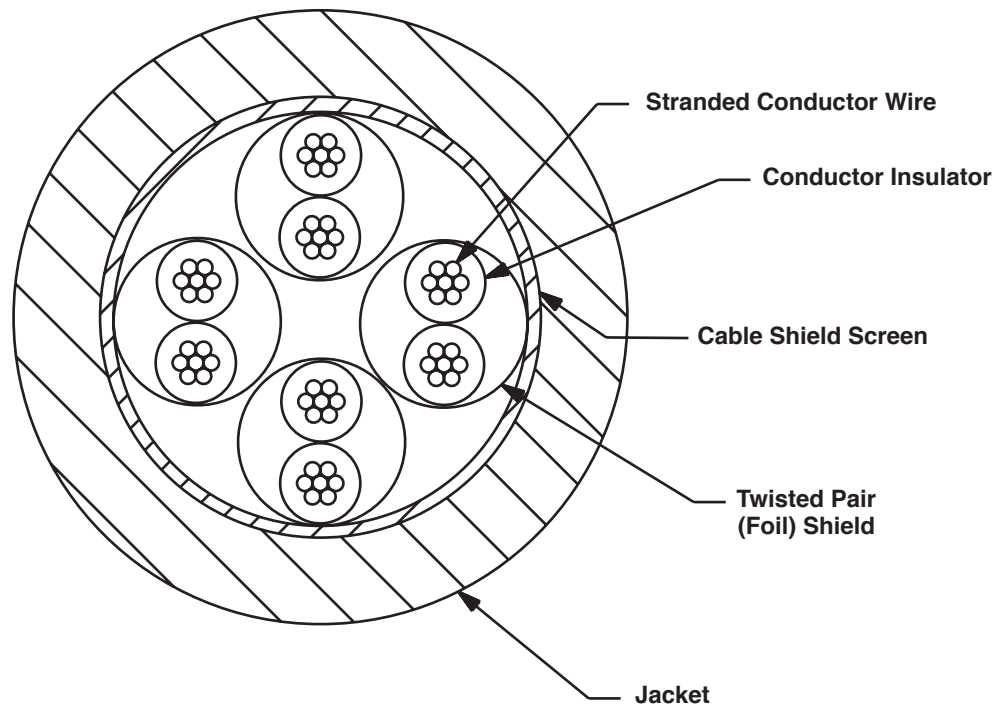
***For standard colors other than Off White, replace IW in part number with BL (Black), EI (Electric Ivory), IG (International Gray), or WH (White).

IndustrialNet™ Category 6A S/FTP Copper Cable

additional specifications

Mechanical Test	
Ultimate Breaking Strength	>400 N (90 lbf.)
Minimum Bend Radius	8x cable diameter
Electrical Test	
Nominal Velocity of Propagation (NVP)	74%
Operating Voltage, Maximum	80V

cable construction



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IndustrialNet™ Category 6A SF/UTP Copper Cable

specifications

Category 6A 4-pair SF/UTP copper cable shall meet or exceed the IEC 61156-6, ANSI/TIA-568-C.2 Category 6A and ODVA Ethernet/IP standards up to 80 meters. The stranded copper conductors shall be 24/7 and 26/7 AWG with high density polyethylene (HDPE) insulation. The copper conductors shall be twisted in pairs and wrapped with a foam polypropylene tape to form a core. All pairs shall then be surrounded by an overall braided shield and metallic foil and covered with a thermoplastic elastomer (TPE) jacket. The jacket shall be oil, UV, weld splatter, and abrasion resistant for enhanced chemical resistance and mechanical performance. The jacket shall be flame retardant (CMX/CM) for Industrial Ethernet applications. This cable shall support high-flex applications and be rated for panel or on-machine applications where space is shared with 600V high voltage cables.



technical information

Electrical performance:	Certified component performance up to 80 meters and exceeds the requirements IEC 61156-6 Category 6A, ANSI/TIA-568-C.2 Category 6A
Standard compliances:	UL AWM Style 2463 (80°C 600V) Flex Life Test: 1 million cycles at 10 x cable diameter; 10 million cycles at 20x cable diameter Torsion Life Test: 3 million cycles, 270° Oil resistance 6 months @ 20°C
Conductors/insulators:	Four pairs of 24/7 AWG and 26/7 stranded copper insulated with high density polyethylene (HDPE) insulation
Insulation diameter:	24 AWG = 1.1mm (0.045 in.) nominal 26 AWG = 0.86mm (0.034 in.) nominal
PoE+ compliant	Meets IEEE 802.3af and IEEE 802.3at for PoE applications
Flame rating:	CMX/CM (UL1685) IEC 60332-1, IEC 60754-1 and -2, IEC 61034-2, EN50575: Eurcolass Fca
Installation tension:	110 N (25 lbf) maximum
Temperature rating:	-40°C to 80°C (-40°F to 176°F) during transport, installation, and operation
Cable jacket:	Thermoplastic elastomer (TPE), oil, sunlight, weld splatter, and abrasion resistant
Cable diameter:	24 AWG = 8.1mm (0.322 in.) nominal 26 AWG = 7.3mm (0.290 in.) nominal
Cable weight:	18 kg/305m (40 lbs./1000 ft.)
Packaging:	Packaged 305 meters (1000 feet) on a reel Package tested to ISTA Procedure 1A

key features and benefits

Third party tested	Cable has been tested by an independent laboratory and complies with the electrical standard requirements of IEC 61156-6 Category 6A and ANSI/TIA-568-C.2 Category 6A standards
Reliability	Shielded SF/UTP cable construction protects against environmental elements that can cause electrical performance failures; stranded conductors for high flex applications and ease of installation; cable jacket is oil, sunlight, weld splatter, and abrasion resistant for enhanced chemical resistance and mechanical performance
High flex applications	Life cycle tested for robotic and c-track use
600V on-machine applications	Rated for panel or on-machine applications when the space is shared with 600V high voltage power cables

applications

IndustrialNet™ Category 6A SF/UTP Copper Cable provides reliability and high performance as an integral component of the end-to-end solution for industrial Ethernet based communications networks. The 4-pair high performance cable ensures highest availability in conditions seen in industrial environments. The cable incorporates a durable oil and UV resistant TPE jacket meeting Appliance Wiring Material requirements and rated for panel or on-machine applications when the space is shared with 600V high voltage power cables.

Key applications include:

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

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IndustrialNet™ Category 6A SF/UTP Copper Cable

24/7 AWG CMX/CM
4-pair: ISFCH6X04A**-UG

26/7 AWG CMX/CM
4-pair: ISFCH6X04B**-UG

IndustrialNet™ Category 6A RJ45 Field Terminable Plug

Field terminable plug: ISPS688FAS

IndustrialNet™ M12 X-Code to RJ45 Panel Mount Adapter

Straight: ICAM12XRJS

90 degree angle: ICAM12X90RJS

Mini-Com® Modular Patch Panel

8-port: CDPP8RG

DIN Rail Adapter

1-port: CADIN1IW***

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

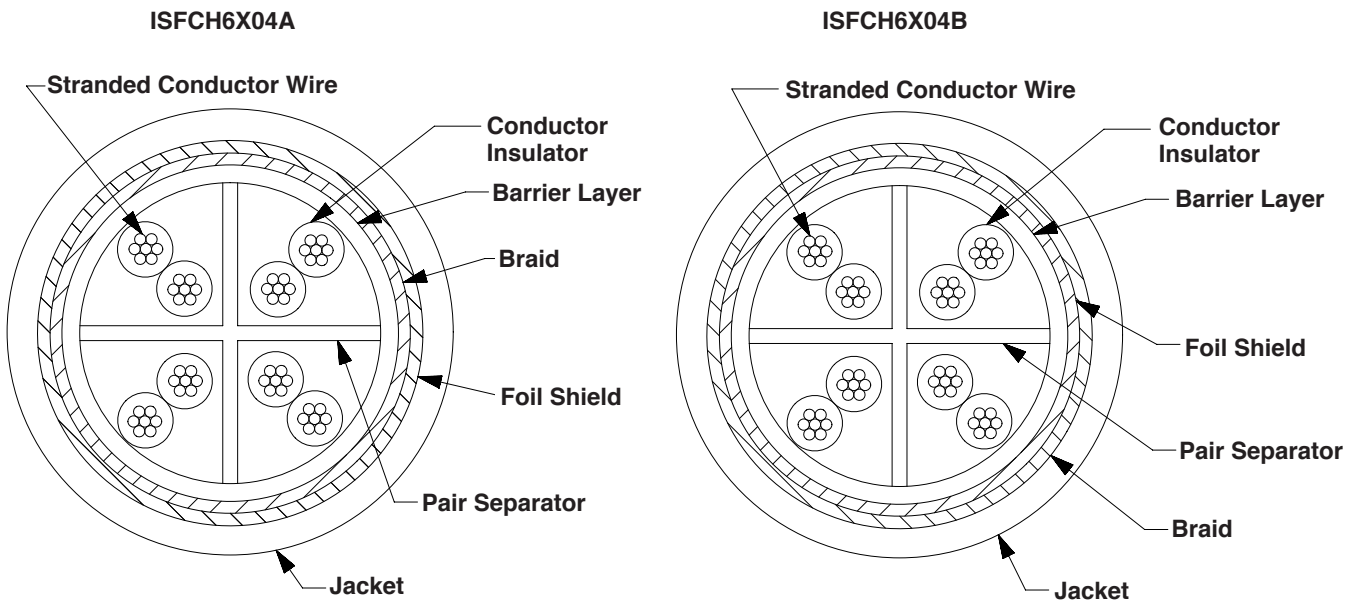
***For standard colors other than Off White, replace IW in part number with BL (Black), EI (Electric Ivory), IG (International Gray), or WH (White).

IndustrialNet™ Category 6A SF/UTP Copper Cable

additional specifications

Mechanical Test	
Ultimate Breaking Strength	>400 N (90 lbf.)
Minimum Bend Radius	2x cable diameter
Electrical Test	
Nominal Velocity of Propagation (NVP)	68%
Operating Voltage, Maximum	80V

cable construction



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