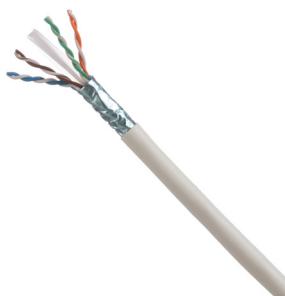


# IndustrialNet™ Category 6A F/UTP Copper Cable

**PANDUIT™**  
SPECIFICATION SHEET

## SPECIFICATIONS

Category 6A 4-pair F/UTP copper cable shall meet or exceed the ANSI/TIA-568.2-E Category 6A and ODVA EtherNet/IP™ standards. The solid copper conductors shall be 23 AWG with high density polyethylene (HDPE) insulation. The copper conductors shall be twisted in pairs. All pairs shall then be covered with a foil shield and an industrially rated PVC jacket which shall be oil, sunlight and weld splatter resistant and flame retardant to CMX/CMR for industrial Ethernet applications. This cable shall be rated for panel or on-machine applications where space is shared with 600V high voltage cables.



## TECHNICAL INFORMATION

<b>Category 6A component performance up to 100 meters:</b>	Meets or exceeds the requirements of ANSI/TIA-568.2-E Category 6A at swept frequencies up to 500 MHz
<b>Category 6A/Class EA channel performance:</b>	Certified channel performance in a 4-connector configuration up to 100m and exceeds the requirements of ANSI/TIA-568.2-E standard swept up to 500 MHz.
<b>Electrical performance:</b>	Conforms to ODVA EtherNet/IP™ performance requirements
<b>Standard compliances:</b>	UL AWM 21695 (600V, 80°C), Oil Res (UL 1581) and Sun Res (UL 444)
<b>RoHS compliance:</b>	Compliant (EU DIRECTIVE 2011/65/EU)
<b>Cable jacket:</b>	Oil, sunlight and weld splatter resistant PVC (CMR/CMX)
<b>Cable diameter:</b>	0.315 in. (8.0mm) nominal
<b>Insulation diameter:</b>	0.043 in. - 0.051 in. (1.09mm - 1.29mm)
<b>Conductors/insulators:</b>	Four pairs of 23 AWG solid copper insulated with HDPE
<b>Flame rating:</b>	CMR UL 1666, CMX UL 444
<b>Installation tension:</b>	110 N (25 lbf) maximum
<b>Temperature rating:</b>	32°F to 122°F (0°C to 50°C) during installation -40°F to 167°F (-40°C to 75°C) during operation
<b>Cable weight:</b>	43 lbs./1000 ft. (20 kg/305m)
<b>Packaging:</b>	1000 ft. (305m) on a reel Package tested to ISTA Procedure 1A

## KEY FEATURES AND BENEFITS

<b>Oil and sunlight performance rated cable jacket:</b>	Delivers enhanced chemical resistance and mechanical performance
<b>EtherNet/IP™ compliant design:</b>	Provides performance levels required to support industrial network applications
<b>600V AWM rated jacket:</b>	Approved for control panel or on-machine applications when the space is shared with 600V high voltage power cables, required for UL 508A

# IndustrialNet™ Category 6A F/UTP Copper Cable

## APPLICATIONS

IndustrialNet Category 6A F/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 cable with oil and UV resistant PVC jacket withstands harsh industrial conditions such as industrial and other hazardous environments. Rated for panel or on-machine applications when the space is shared with 600V high voltage power cables, IndustrialNet Category 6A Solid Conductor F/UTP Copper Cable is ideal for control panel deployments featuring power source voltages. Cable is suitable for transmission of high performance 10BASE-T, 100BASE-T and 1000BASE-T uplinks featuring up to gigabit data transmission from the control panel to the consolidation point.

## ADDITIONAL TESTING

### Mechanical Test

**Ultimate breaking strength:** 178N (40 lbf.)

**Minimum bend radius:** 8 x cable diameter

### Electrical Test

**Nominal velocity of propagation (NVP):** 66% nominal

**Operating voltage, maximum:** 80 V

## ENGINEERING DRAWING

