# IndustrialNet<sup>™</sup> Unshielded Category 6A U/UTP Copper Cable

North America and Latin America



# **SPECIFICATIONS**

Category 6A 4-pair U/UTP copper cable shall meet or exceed the ANSI/TIA-568.2-D 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 and wrapped with a foam polypropylene tape to form a core. All pairs shall then be covered with a discontinuous foil shield and an industrially rated PVC jacket which shall be oil and sunlight 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.



IndustrialNet Unshielded Category 6A U/UTP Copper Cable

CMX/CMR: IURH6X04\*\*-UG

\*\*Colors: BL (Black) or TL (Teal)

# **TECHNICAL INFORMATION**

Category 6A component/ channel performance up to 100 meters:	Meets or exceeds the requirements of ANSI/TIA-568.2-D Category 6A at swept frequencies up to 500 MHz	
Electrical performance:	Conforms to ODVA EtherNet/IP^ performance requirements	
Standard compliances:	UL AWM Style 21695 (80°C 600V), Oil Res and Sun Res, UL 444 Sun Res, UL 1666 CMR	
RoHS compliance:	Compliant (EU DIRECTIVE 2011/65/EU)	
Conductors/insulators:	Four pairs of 23 AWG solid copper insulated with high density polyethylene (HDPE) insulation	
Insulation diameter:	1.12mm – 1.27mm (0.044 in. – 0.050 in.)	
Flame rating:	CMX/CMR	
Installation tension:	110 N (25 lbf.) maximum	
Temperature rating:	-40°F to 176°F (-20°C to 80°C) during transport, installation -40°F to 176°F (-40°C to 80°C) operation temperature	
Cable jacket:	Oil and sunlight resistant PVC	
Cable diameter:	8.1mm (0.319 in.) nominal	
Cable weight:	20 kg/305m (43 lbs./1000 ft.)	
Packaging:	305m (1000 ft.) on a reel Package tested to ISTA Procedure 1A	

# **KEY FEATURES AND BENEFITS**

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

#### **APPLICATIONS**

IndustrialNet Category 6A U/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 oil rigs 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 U/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.



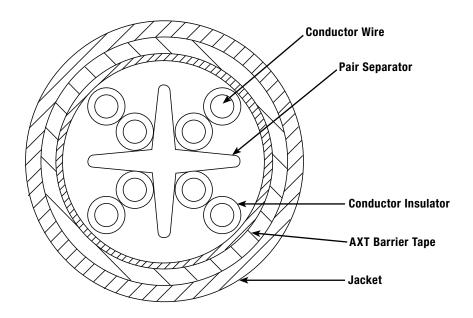
All listed part numbers are compliant with the U.S. Trade Agreements Act (TAA) for purchases shipped to customers in the United States.

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# **ADDITIONAL SPECIFICATIONS**

	Mechanical Test	
Ultimate breaking strength:	> 400 N (90 lbf)	
Minimum bend radius:	8 x cable diameter	
Engineering Test		
Nominal velocity of propagation (NVP):	66% nominal	
Operating voltage, maximum:	80 V	

### **ENGINEERING DRAWING**



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