# TX6A<sup>™</sup> Shielded Category 6A F/UTP Copper Cable

## **SPECIFICATIONS**

Category 6A cable shall be constructed of 23 AWG copper conductors with PE CM, CMR or LSZH insulation. The copper conductors shall be twisted in pairs and separated by an integrated pair separator. All four pairs shall be surrounded by an overall metallic foil shield within a low smoke zero halogen jacket. The TX6A Shielded Copper Cable must be installed as part of a complete TX6A Shielded Copper Cabling System to achieve 10GBASE-T certified performance.





TX6A Shielded Category 6A F/UTP Copper Cable				
LSZH:	PFL6X04*-CEG			
CM:	PFC6X04*-CEG			
CMR:	PFR6X04*-CG			
CMP:	PFP6X04*-UG			

\*Colors: BU (Blue) or WH (White). For additional cable colors, contact customer service.

#### **TECHNICAL INFORMATION**

Electrical performance:	Certified channel performance in a 4-connector configuration up to 100 meters and exceeds the requirements of ISO 11801 Class $E_A$ and ANSI/TIA-568.2-D Category 6A Standards for supporting 10GBASE-T transmission over twisted-pair cabling systems as part of the TX6A Shielded Copper Cabling System					
	Certified component performance up to 100 meters and meets or exceeds the component requirement of the ISO/IEC 11801 Category 6A and ANSI/TIA-568.2-D Category 6A Standards for supporting 10GBASE-T transmission over twisted-pair cabling systems					
Conductors/insulators:	23 AWG solid bare copper wire covered by PE insulation					
Insulation diameter:	1.05mm – 1.12mm (0.0415 in. – 0.044 in.)					
Flame rating:	LSZH: IEC 60332-3-22, IEC 60754-1, IEC 60754-2, IEC 601034-2, EN 50575: EuroClass Dca-s2,d2,a1					
	CM: UL 1685					
	CMR: UL 1666					
	CMP: NFPA 262					
Standards compliance:	UL Listed CMP-LP 0.7A and CMR-LP 0.5A					
Installation tension:	110 N (25 lbf) maximum					
PoE compliance:	Meets IEEE 802.3af, IEEE 802.3at and IEEE 802.3bt for PoE applications					
Temperature rating:	-20°C to 75°C (-4°F to 167°F) during installation					
	-20°C to 75°C (-4°F to 167°F) during operation					
Cable jacket:	LSZH, CM, CMR, CMP					
Cable diameter:	LSZH: 7.3mm (0.287 in.) nominal					
	CM, CMR: 7.2mm (0.284 in.) nominal					
	CMP: 7.5mm (0.296 in.) nominal					
Cable weight:	LSZH: 18 kg/305m (40 lbs./1000 ft.)					
	CM, CMR: 17 kg/305m (37 lbs./1000 ft.)					
	CMP: 20 kg/305m (46 lbs./1000 ft.)					
Packaging:	305m (1000 ft.) on a reel					
	Packaged tested to ISTA Procedure 1A					

### **KEY FEATURES AND BENEFITS**

Integrated pair divider:	Separates pairs for exceptional cable performance
Overall foil shield:	Provides superior structural integrity and reduces low frequency external interference to ensure exceptional cable performance at all swept frequencies up to 500 MHz
Internal drain wire:	Facilitates means of grounding the cable and provides for efficient performance and protection of network investment
Descending length cable markings:	Easy identification of remaining cable reduces installation time and cable scrap
Bulk packaging:	Supplied 305m (1000 ft.) to a reel

### **APPLICATIONS**

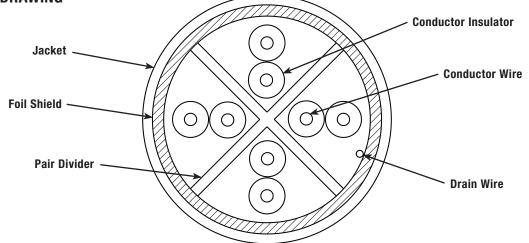
TX6A Shielded Copper Cable is a component of the TX6A Shielded Copper Cabling System. This end-to-end system provides a cost-effective medium for ensuring that network bandwidth needs are easily met today and tomorrow. The shielded cabling system provides high performance, excellent EMI suppression, and aids in secure data transmission. The solution helps ensure organizations efficiently and reliably meet their data transmission needs. Usage of the TX6A Shielded Copper Cabling System include high bandwidth applications within data centers and connections to high-end workstations such as:

- 10GBASE-T Ethernet
- Data center applications
- Virtual business management applications

#### **ADDITIONAL SPECIFICATIONS**

Mechanical Test							
	LSZH	СМ	CMR	СМР			
Ultimate breaking strength:	> 400 N (90 lbf)						
Minimum bend radius:	8 x cable diameter during installation 4 x cable diameter during operation						
Electrical Test							
	LSZH	СМ	CMR	СМР			
Mutual capacitance:	< 5.6 nF per 100m (328 ft.) at 1 kHz						
Characteristic impedance:	< 100 Ohm ± 15% up to 100 MHz						
Nominal Velocity of Propagation (NVP):	63% nominal	65% nominal		70% nominal			
DC resistance:	< 9.38 Ohm per 100m (328 ft.)	< 9.50 Ohm per 100m (328 ft.)	< 7.32 Ohm per 100m (328 ft.)	< 8.9 Ohm per 100m (328 ft.)			
DC resistance unbalance:	< 5%	< 2%	< 5%	< 4%			
Capacitance imbalance:	< 330 pF per 100m (328 ft.)	< 160 pF per 100m (328 ft.)	< 330 pF per 100m (328 ft.) at 1 kHz (pair/ground)	< 330 pF per 100m (328 ft.) at 1 kHz (pair/ground)			
Operating voltage, maximum:	80 V						

### **ENGINEERING DRAWING**



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