

## Category 6A (Augmented) UTP Horizontal Cable 23AWGx4P, CMR

### Standards / Compliances

All Proposed Category 6A Requirements as Per ANSI/TIA, ISO/IEC, and CENELEC EN Standards  
 ANSI/TIA-568-C.2 Cat.6A  
 ISO/IEC 2nd Edition 11801 Class EA  
 CENELEC EN 50173-1, CENELEC EN 50288-10-1 for horizontal cable  
 IEC 2nd Edition 61156-5 for horizontal cable  
 Flame Retardancy is verified according to UL 1666  
 RoHS and REACH compliant

### Construction / Characteristics

Conductor	Material / Size	Bare Copper / 23AWG
Insulation	Material	HDPE
	Thickness	Nominal: 0.248 mm
	Diameter	Nominal: 1.33 mm
	Colors	Blue/White-Blue Orange/White-Orange Green/White-Green Brown/White-Brown
	Unaged Elongation	Min. 100%
	Unaged Tensile Strength	Min. 0.847 Kg/mm <sup>2</sup>
Jacket	Material	Flame Retardant PVC
	Thickness	Nominal: 0.65 mm
	Diameter	Nominal: 7.3 mm
	Color	Assorted upon request
	Unaged Elongation	Min. 100%
	Unaged Tensile Strength	Min. 1.407 Kg/mm <sup>2</sup>
	Aging at 100°C for 168Hrs	Min. elongation retention:50% Min. tensile strength retention:85%
Marking	Cat.6A U/UTP 23AWGX4P 75C EXXXXXX CMR(UL) ETL VERIFIED TO ANSI/TIA-568-C.2 XXXXFT	

### Construction / Characteristics



## Applications

- 10GBASE-T Ethernet
- 1000BASE-T Ethernet
- 10BASE-T, 100BASE-TX Fast Ethernet (IEEE 802.3)
- 100 VG – AnyLAN (IEEE802.12), 155/622 Mbps ATM

## Electrical Characteristics

Dielectric Strength of Insulation		2500 V dc / 2 seconds		
Insulation Resistance Test		Min. 5000 MΩ·Km		
Conductor Resistance		Max. 9.38 Ω/100m at 20°C		
Resistance Unbalance		Max. 2%		
Capacitance Unbalance		Max. 160 pF/100m		
Mutual Capacitance		Max. 5600 pF/100m		
Impedance	1~100MHz	100Ω ± 15%		
	100~500MHz	100Ω ± 22%		
Attenuation & Near End Cross Talk	Frequency	Max.Attenuation	NEXT	PSNEXT
	(MHz)	(dB/100 meters)	(dB), Min	(dB), Min
	1 MHz	2.1*	74.3*	72.3*
	10 MHz	5.9*	59.3*	57.3*
	100 MHz	19.1*	44.3*	42.3*
	200 MHz	27.6*	39.8*	37.8*
	250 MHz	31.1*	38.3*	36.3*
	300 MHz	34.3*	37.1*	35.1*
	400 MHz	40.1*	35.3*	33.3*
500 MHz	45.3*	33.8*	31.8*	

The asterisked (\*) value are for information only. The minimum Next coupling loss for any pair combination at room temperature is to be greater than the value determined using the formula:  $NEXT \geq 44.3 - 15 \log(f/100)$

orange 2	green 3
white/orange	white/green
blue 1	brown 4
white/blue	white/brown

