



US-9106A

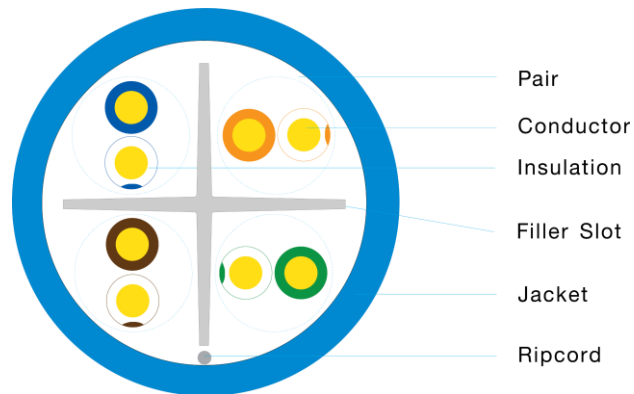
US-9106A-1



Scope of Applications

This specification covers the general requirements for UTP cable used for indoor horizontal installation. LINK Category 6 U/UTP cables compliant with ISO/IEC 11801 Class E and ANSI/TIA-568.2-E requirements for category 6 performance. These cables are characterized to 250MHz, Powersum NEXT tested. The cable covered under UL certification which the UL mark E197771 appearing on the cable jacket.

Drawing



Technical Standards

- ANSI/TIA-568.2-E Category 6
- ANSI/TIA-568.2-D Category 6
- ANSI/TIA-568-C.2 Category 6
- ISO/IEC 11801:2017 class E
- EN 50173-1 Category 6
- EN 50288-6-1
- IEC 61156-5
- ICEA S-102-700 Category 6
- ASTM D4566-98
- NEMA WC 66
- UL 1685
- UL 444
- CSA 22.2 No.214
- UL Verified to Category 6
- Approvals UL listed file no. E197771
- RoHS Compliant



Cable Construction

Conductor	Material	Solid bare copper
	No. of Conductor	4 Pairs (8 wires)
	Diameter	24 AWG
Insulation	Material	High Density Polyethylene (HDPE)
	Diameter	0.96 ±0.02 mm
Insulated Conductor Color Code	Pair 1	White-Blue / Blue
	Pair 2	White-Orange / Orange
	Pair 3	White- Green / Green
	Pair 4	White-Brown / Brown
Filler Slot (Cross Filler)	Material	FRPE
Rip cord		Under Jacket
Jacket	Material	Lead free, FR-PVC
	Thickness	0.50 ±0.02 mm
	Color	Blue
Cable Diameter		5.7 ±0.2 mm
Marking	Pkg. 1000Ft (305 m)	Black every 2 ft
	Pkg. 100 m	Black every meter
Flame Rating		CM

Electrical Characteristic

Impedance	100 ± 15 Ohms, 1 MHz to 250 MHz
Mutual Capacitance	≤ 5.6 nF Max / 100m
Capacitance, Unbalance	≤ 160 pF Max / 100m
DC Resistance	≤ 9.38 ohm Max./100m
DC Resistance, Unbalance	≤ 3% Max.
Dielectric Strength	≤ 1 kV/min
Insulated Resistance	≥ 5000 MΩ/km
AC leakage current through overall jacket	≤ 10mA (1.5 kV AC)
Spark Test	2.5 kV DC
Propagation Delay	≤ 536 ns/100m Max @250MHz
Delay Skew	≤ 45 ns Max
NVP	69%

Physical Properties

Tensile Strength		110 N (25 lbf)
Ultimate Breaking Strength		>400 N (90lbf)
Tensile Strength of Jacket		>10 Mpa (>1400PSI)
Min. Bending Radius		4 X Cable Diameter
Temperature	Installation/Operation	-20°C to 75°C
	Storage	-20°C to 80°C



PERFORMANCE CHARACTERISTIC (meet or exceed ANSI/TIA-568.2-E Category 6)

Frequency (MHz)	Insertion Loss (dB/100m)	NEXT (dB)		ACR-N (dB)		PS NEXT (dB)		PS ACR-N (dB)		ACR-F (dB)		PS ACR-F (dB)		RL (dB)	
	Max.	min	nom	min	nom	min	nom	min	nom	min	nom	min	nom	min	nom
1	2.0	73.5	76.5	72.2	75.2	76.0	78.0	73.5	75.8	69.0	72.0	66.0	68.0	20.0	28.0
4	3.8	63.9	66.9	60.6	63.6	67.0	69.0	62.7	65.0	56.5	59.5	53.5	55.5	23.0	31.0
8	4.9	59.6	62.6	55.4	58.4	63.4	65.4	57.1	58.8	51.0	53.1	48.0	50.0	24.5	32.5
10	5.6	58.8	61.8	53.3	56.3	61.2	63.2	54.5	56.8	48.5	51.5	46.4	48.4	25.0	33.0
16	7.6	56.0	59.0	48.4	51.4	58.9	60.9	49.9	52.2	45.0	48.0	42.2	44.2	25.0	33.0
20	8.5	54.2	57.2	46.3	49.3	57.0	59.0	48.0	49.8	42.5	45.5	40.1	42.1	25.0	33.0
25	8.9	53.0	56.0	43.1	46.1	56.8	58.8	44.9	47.2	41.0	44.0	37.7	39.7	24.3	32.3
31.25	10.0	51.3	54.3	40.7	43.7	54.0	56.0	42.8	44.7	38.5	41.5	35.6	37.6	23.6	31.6
62.5	15.4	47.4	50.4	32.3	35.3	52.2	54.2	33.0	35.0	33.0	36.0	29.5	31.5	21.5	29.5
100	17.4	42.6	45.6	24.5	27.5	49.8	51.8	25.6	27.8	28.5	31.5	25.8	27.8	20.1	28.1
200	29.0	39.3	42.3	10.4	13.4	45.0	47.0	12.3	13.9	23.5	25.5	21.7	23.7	18.0	26.0
250	32.8	37.8	40.8	5.1	8.1	43.2	45.2	6.5	8.6	22.8	24.8	18.0	20.0	17.3	25.3

Applications

- Structure cabling for horizontal
- 2.5G/5G BASE-T (IEEE 802.3bz)
- 10G BASE-T (IEEE 802.3an 10Gigabit Ethernet) **limited distance
- 1000 BASE-T (IEEE 802.3ab Gigabit Ethernet)
- 1000 BASE-TX (TIA/EIA-854)
- 100 BASE-TX (IEEE 802.3u Fast Ethernet)
- 10 BASE-T (IEEE 802.3i Ethernet)
- 52/155/622Mbps and 1.2Gbps ATM
- 4/16 Mbps Token Ring
- IEEE 802.3af (PoE), IEEE 802.3at (PoE+), IEEE 802.3bt (Type4)
- TP-PMD, TPDDI, ISDN, CDDI, VoIP
- EtherCAT Industrial standard, HDBaseT 2.0 standard
- Baseband, Broadband
- Digital and analog for data, video and audio application

Order Information

Part number	Description	Color	Length	Package
US-9106A	Category 6, 4 Pairs, U/UTP Cable, 24AWG, CM, 250MHz	Blue	305 m	Reelink
US-9106A-1	Category 6, 4 Pairs, U/UTP Cable, 24AWG, CM, 250MHz	Blue	100 m	Easy Box

*Other jacket color available on request

Specifications subject to change without notice.

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