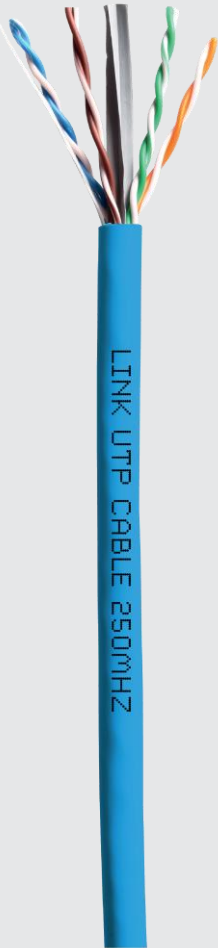




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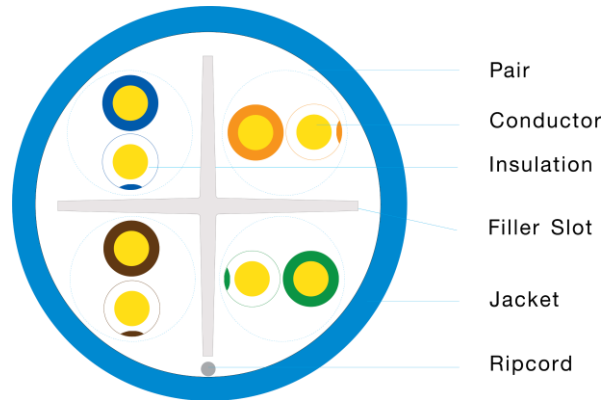


## CAT6 UTP (250MHz) w/Cross Filler, 23AWG, LSZH, BLUE

### Scope of Applications

This specification covers the general requirements for UTP cable used for indoor installation. LINK Category 6 U/UTP LSZH cables compliant ISO/IEC 11801 Class E and ANSI/TIA-568.2-D requirements for category 6 performance. The outer jacket material made from LSZH compound to reduces the amount toxic smoke and corrosive gas emitted during burned, for users' safety as well as increases the safety of firefighting operations.

### Drawing



### Technical Standards

- 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, IEC 60332-1
- IEC 60754-1, IEC 60754-2
- IEC 61034-1, IEC 61034-2
- ICEA S-102-700 Category 6
- ASTM D4566-98
- NEMA WC 66
- UL 444
- CSA 22.2 No.214
- RoHS Compliant

## Cable Construction

<b>Conductor</b>	<b>Material</b>	Solid bare copper
	<b>No. of Conductor</b>	4 Pairs (8 wires)
	<b>Diameter</b>	23 AWG
<b>Insulation</b>	<b>Material</b>	High-Density Polyethylene (HDPE)
	<b>Diameter</b>	1.00 ±0.02 mm
<b>Insulated Conductor Color Code</b>	<b>Pair 1</b>	White-Blue / Blue
	<b>Pair 2</b>	White-Orange / Orange
	<b>Pair 3</b>	White- Green / Green
	<b>Pair 4</b>	White-Brown / Brown
<b>Ripcord</b>		Under Jacket
<b>Filler Slot (Cross Filler)</b>	<b>Material</b>	PE
<b>Jacket</b>	<b>Material</b>	Lead-free, FR-LSZH
	<b>Thickness</b>	0.56 ±0.02 mm
	<b>Color</b>	Blue
<b>Cable Diameter</b>		6.1 ±0.2 mm
<b>Marking</b>	<b>Pkg. 1000Ft (305 m)</b>	Black color in every 2 ft
	<b>Pkg. 100 m</b>	Black color in every meter
<b>Flame Rating</b>		LSZH (Low Smoke Zero Halogen)

## Electrical Characteristic

<b>Impedance</b>	100 ± 5 Ohms, 1 MHz to 250 MHz
<b>Mutual Capacitance</b>	≤ 5.6 nF Max / 100m
<b>Capacitance, Unbalance</b>	≤ 160 pF Max / 100m
<b>DC Resistance</b>	≤ 7.32 ohm Max./100m
<b>DC Resistance, Unbalance</b>	≤ 3% Max.
<b>Dielectric Strength</b>	≤ 1 kV/min
<b>Insulated Resistance</b>	≥ 5000 MΩ/km
<b>AC leakage current through overall jacket</b>	≤ 10mA (1.5 kV AC)
<b>Spark Test</b>	2.5 kV DC
<b>Propagation Delay</b>	≤ 536 ns/100m Max @250MHz
<b>Delay Skew</b>	≤ 30 ns Max
<b>NVP</b>	69%

## Physical Properties

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

## PERFORMANCE CHARACTERISTIC (meet or exceed ANSI/TIA-568.2-D 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)	
		min	nom	min	nom	min	nom	min	nom	min	nom	min	nom	min	nom
0.772	1.8	79.0	82	77.2	80.2	77.0	79.0	75.2	77.2	70.0	73	67.0	69	-	-
1	2.0	78.0	81.0	76.0	79.3	76.0	78.0	73.5	75.8	69.0	72.0	66.0	68.0	20.0	28.0
4	3.8	69.8	72.8	66.0	69.0	67.0	69.0	62.7	65.0	56.5	59.5	53.5	55.5	23.0	31.0
8	5.3	65.4	68.4	60.1	62.8	63.4	65.4	57.1	58.8	51.0	53.1	48.0	50.0	24.5	32.5
10	6.0	63.8	66.8	57.8	61.1	61.2	63.2	54.5	56.8	48.5	51.5	46.4	48.4	25.0	33.0
16	7.6	60.0	63.0	52.4	55.7	58.9	60.9	49.9	52.2	45.0	48.0	42.2	44.2	25.0	33.0
20	8.5	59.0	61.0	50.5	53.3	57.0	59.0	48.0	49.8	42.5	45.5	40.1	42.1	25.0	33.0
25	9.5	57.5	60.5	48.0	51.3	56.8	58.8	44.9	47.2	41.0	44.0	37.7	39.7	24.3	32.3
31.25	10.7	56.0	59.0	45.3	46.2	54.0	56.0	42.8	44.7	38.5	41.5	35.6	37.6	23.6	31.6
62.5	15.4	50.5	53.5	35.1	38.4	52.2	54.2	33.0	35.0	33.0	36.0	29.5	31.5	21.5	29.5
100	19.8	47.5	50.5	27.7	30.9	49.8	51.8	25.6	27.8	28.5	31.5	25.8	27.8	20.1	28.1
155	25.1	45.0	48.0	19.7	23.1	47.2	49.2	17.2	19.6	25.0	28.0	23.0	25.0	18.8	26.8
200	29.0	44.4	47.4	15.4	18.0	45.0	47.0	12.3	13.9	22.5	25.5	21.7	23.7	18.0	26.0
250	32.0	42.9	45.9	10.9	13.1	43.2	45.2	6.5	8.6	21.2	24.2	18.0	20.0	17.3	25.3

## Applications

- Structure cabling for building backbone
- Structure cabling for horizontal
- 2.5G/5G BASE-T (IEEE 802.3bz)
- 10G BASE-T (IEEE 802.3an 10Gigabit Ethernet) \*55m
- 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-9106BLSZH	Category 6, 4 Pairs, U/UTP Cable, 23AWG, LSZH, 250MHz	Blue	305 m	Reel
US-9106BLSZH-1	Category 6, 4 Pairs, U/UTP Cable, 23AWG, LSZH, 250MHz	Blue	100 m	Reel

\*Other jacket color available on request

Specifications subject to change without notice.

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