



US-9146LSZH

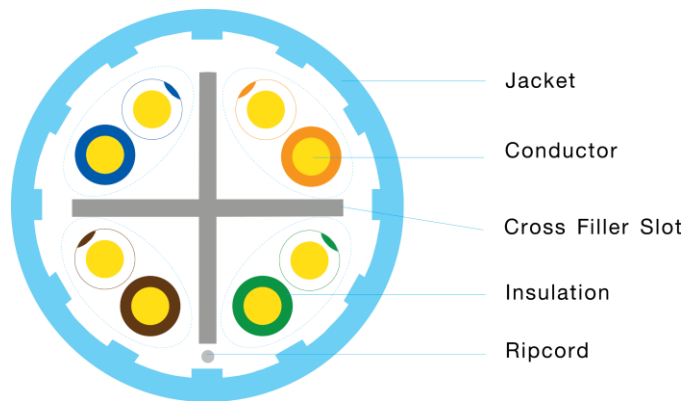


CAT6A UTP XG (750MHz) w/Cross Filler, 23AWG, LSZH

Scope of Applications

This specification covers the general requirements for UTP cable used for indoor installation. LINK Category 6A U/UTP LSZH cables compliant ISO/IEC 11801 Class EA and ANSI/TIA-568.2-E requirements for category 6A performance. These cables are characterized to 750MHz, Powersum NEXT tested certified. The outer jacket material made from LSZH compound to reduces the amount toxic smoke and corrosive has emitted during burned, for users' safety as well as increases the safety of firefighting operations.

Drawing



Technical Standards

- ANSI/TIA-568.2-E Category 6A
- ANSI/TIA-568.2-D Category 6A
- ANSI/TIA-568-C.2 Category 6A
- ISO/IEC 11801:2017 class EA
- EN 50173-1 Category 6A
- EN 50288-11-1
- IEC 61156-5, IEC 60332-1
- IEC 60754-1, IEC 60754-2
- IEC 61034-1, IEC 61034-2
- UL 444/NEC 800
- CSA 22.2 No.214
- 3P Verified to Category 6A
- RoHS Compliant



Cable Construction

Conductor	Material	Solid bare copper
	No. of Conductor	4 Pairs (8 wires)
	Diameter	23 AWG
Insulation	Material	High Density Polyethylene (HDPE)
	Diameter	1.10 ±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
Rip cord		Under Jacket
Filler Slot (Cross Filler)	Material	PE
Jacket	Material	Lead free, FR-LSZH
	Thickness	1.20 ±0.02 mm
	Color	Aqua Blue
Cable Diameter		8.5 ±0.2 mm
Marking		Black color in every 2 ft
Flame Rating		LSZH (Low Smoke Zero Halogen)

Electrical Characteristic

Impedance	100 ± 5 Ohms, 1 MHz to 750 MHz
Mutual Capacitance	≤ 5.6 nF Max / 100m
Capacitance, Unbalance	≤ 160 pF Max / 100m
DC Resistance	≤ 6.658 Ohms 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
Propagation Delay	≤534 ns/100m Max @500MHz
Delay Skew	≤25 ns Max
NVP	65%

Physical Properties

Tensile Strength		110 N (25 lbf)
Ultimate Breaking Strength		>400 N (90lbf)
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 6A)

Frequency (MHz)	Insertion Loss (dB/100m)	NEXT (dB)		ACRF (dB)		PSNEXT (dB)		PSACRF (dB)		PSANEXT (dB)		PS.AACRF (dB)		RL (dB)	
	Max	min	nom	min	nom	min	nom	min	nom	Max.	min	nom	min	nom	min
0.772	1.8	79.0	82	77.2	80.2	77.0	79.0	72.2	74.2	68.1	70.1	67.8	69.8	-	-
1	2.0	78.3	81.3	71.8	79.3	76.0	78.0	68.8	70.8	67.0	67.0	67.0	69.0	20.0	28.0
4	3.7	69.3	72.3	59.8	62.8	67.3	69.3	56.8	58.8	67.0	67.0	66.1	68.1	23.0	31.0
8	5.2	65.4	68.4	55.2	58.2	63.4	65.4	47.1	49.1	67.0	67.0	64.0	64.0	24.5	32.5
10	6.0	63.3	66.3	51.8	61.1	61.3	63.3	48.8	50.8	67.0	67.0	60.7	64.7	25.0	33.0
16	7.4	60.0	63.0	48.7	51.7	58.9	60.9	45.3	47.3	67.0	67.0	58.6	60.6	25.0	33.0
20	8.3	58.8	61.8	45.8	48.8	56.8	58.8	42.8	44.8	67.0	67.0	54.6	56.6	25.0	33.0
25	9.2	57.5	60.5	42.3	45.3	56.8	58.8	41.2	43.2	67.0	67.0	51.2	51.2	24.3	32.3
31.25	10.4	55.9	59.0	41.9	44.9	53.9	55.9	38.9	40.9	67.0	67.0	48.3	50.3	23.6	31.6
62.5	14.9	51.4	54.4	35.9	38.9	49.4	51.4	32.9	34.9	65.0	67.0	42.3	44.3	21.5	29.5
100	19.0	48.3	51.5	31.8	34.8	46.3	48.3	28.8	30.8	62.5	64.5	38.2	40.2	20.1	28.1
155	24.2	45.0	48.0	27.2	30.2	44.5	46.5	23.9	25.9	61.7	63.7	36.4	38.4	18.8	26.8
200	27.5	43.8	47.4	24.6	29.6	41.8	43.8	22.8	24.8	58.0	60.0	32.2	34.2	18.0	26.0
250	31.0	42.3	45.3	23.8	26.8	40.3	42.3	20.8	22.8	56.5	58.5	30.2	32.2	17.3	25.3
300	34.2	41.1	44.1	22.3	25.3	39.3	41.3	19.3	21.3	55.3	57.3	28.7	30.7	16.8	24.8
350	38.3	39.5	42.5	21.5	24.5	38.5	40.5	17.6	19.6	54.5	56.5	27.9	29.9	16.3	24.3
400	40.1	38.5	41.5	19.8	21.8	37.5	39.5	16.2	18.2	53.2	55.2	26.4	28.4	15.9	23.9
450	42.6	38.0	41.0	18.4	21.4	36.5	38.5	15.1	17.1	52.8	54.8	25.1	27.1	15.5	23.5
500	45.3	37.8	40.8	17.8	20.8	35.8	37.8	14.8	16.8	52.0	54.0	24.2	26.2	15.2	23.2
550	47.7	37.2	40.2	-	-	35.2	37.2	-	-	-	-	-	-	17.2	25.2
650	52.4	36.1	39.1	-	-	34.6	36.6	-	-	-	-	-	-	16.7	24.7
750	56.8	35.2	38.2	-	-	33.2	35.2	-	-	-	-	-	-	16.0	24.0

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)
- 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-9146LSZH	Category 6A, 4 Pairs, UTP SUPER XG Cable, 23AWG, LSZH, 750MHz	Aqua Blue	305 m	Roll

*Other jacket color available on request

Specifications subject to change without notice.

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