



US-9106LSZH

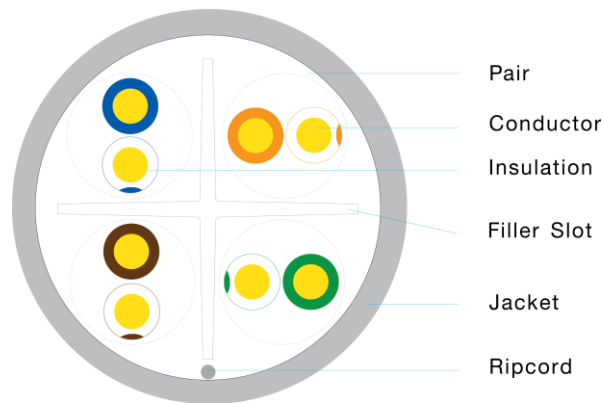
US-9106LSZH-1



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

Conductor	Material	Solid bare copper
	No. of Conductor	4 Pairs (8 wires)
	Diameter	23 AWG
Insulation	Material	High Density Polyethylene (HDPE)
	Diameter	1.00 ±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	FRPE
Jacket	Material	Lead free, FR-LSZH
	Thickness	0.56 ±0.02 mm
	Color	White
Cable Diameter		6.1 ±0.2 mm
Marking	Pkg. 1000Ft (305 m)	Black color in every 2 ft
	Pkg. 100 m	Black color in every meter
Flame Rating		LSZH (Low Smoke Zero Halogen)

Electrical Characteristic

Impedance	100 ± 5 Ohms, 1 MHz to 250 MHz
Mutual Capacitance	≤ 5.6 nF Max / 100m
Capacitance, Unbalance	≤ 160 pF Max / 100m
DC Resistance	≤ 7.32 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	≤ 30 ns Max
NVP	69%

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-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)	
		Max.	min	nom	min	nom	min	nom	min	nom	Max.	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-9106LSZH	Category 6, 4 Pairs, U/UTP Cable, 23AWG, LSZH, 250MHz	White	305 m	Reel
US-9106LSZH-1	Category 6, 4 Pairs, U/UTP Cable, 23AWG, LSZH, 250MHz	White	100 m	Reel

*Other jacket color available on request

Specifications subject to change without notice.

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