



US-9116LSZH

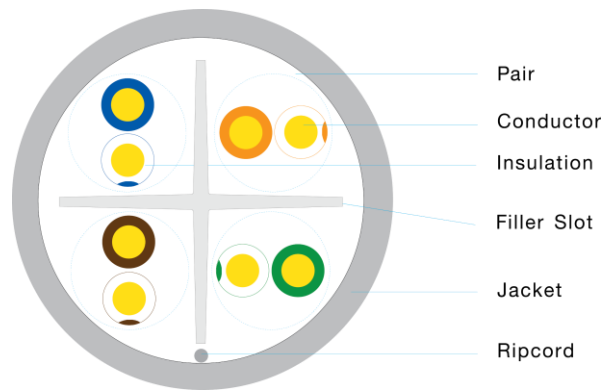


CAT6 UTP ULTRA (600MHz) w/Cross Filler, 23AWG, LSZH

Scope of Applications

This specification covers the general requirements for UTP cable used for indoor installation. LINK Ultra Category 6 U/UTP LSZH cables compliant ISO/IEC 11801 Class E and ANSI/TIA-568.2-E requirements for category 6 performance. These cables are characterized to 600MHz, 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 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, 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
- ETL and 3P Verified to Category 6
- Intertek Certification no. 104047595CRT-001
- 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	0.51 ±0.02 mm
	Color	White
Cable Diameter		6.0 ±0.2 mm
Marking		Black every 2 ft
Flame Rating		LSZH (Low Smoke Zero Halogen)

Electrical Characteristic

Impedance	100 ± 5 Ohms, 1 MHz to 600 MHz
Mutual Capacitance	≤ 5.6 nF Max / 100m
Capacitance, Unbalance	≤ 160 pF Max / 100m
DC Resistance	≤ 6.658-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 @600MHz
Delay Skew	≤ 30 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
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
200	24.7	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	28.9	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
300	32.8	41.5	43.5	4.9	6.5	40.7	42.7	1.9	4.0	18.5	21.5	15.6	17.6	16.8	24.8
350	36.4	39.5	42.5	1.0	3.1	38.5	40.5	-	-	17.5	20.5	14.5	16.5	16.3	24.3
400	39.7	38.5	41.5	-	-	37.5	39.5	-	-	16.5	19.5	13.7	15.7	15.9	23.9
450	42.9	38.0	41.0	-	-	36.5	38.5	-	-	15.5	18.5	12.8	14.8	15.5	23.5
500	46.0	37.5	40.5	-	-	35.5	37.5	-	-	14.5	17.5	11.5	13.5	15.2	23.2
550	48.9	36.7	39.7	-	-	34.5	36.5	-	-	13.5	16.5	10.7	12.7	14.9	22.9
600	51.1	36.5	39.5	-	-	34.5	36.5	-	-	13.0	15.0	10.0	12.0	14.7	22.7

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) **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-9116LSZH	Category 6, 4 Pairs, U/UTP Cable, 23AWG, LSZH, 600MHz	White	305 m	Reelink

*Other jacket color available on request

Specifications subject to change without notice.

© 2023 LINK CORP. ALL RIGHTS RESERVED

www.linkcable.com

US-9116LSZH-V1.1-250425