



US-9015LSZH

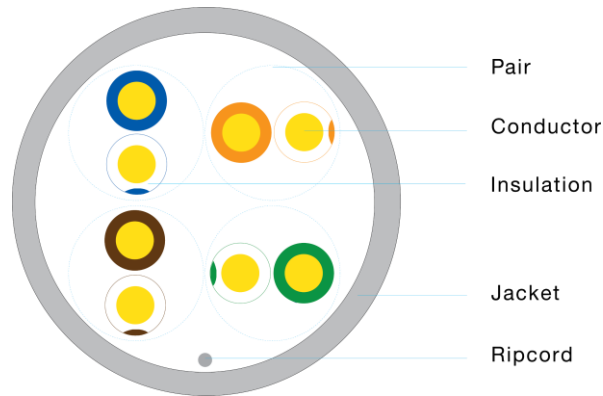
US-9015LSZH-1



### Scope of Applications

This specification covers the general requirements for UTP cable used for indoor installation. LINK Ultra Category 5E U/UTP cables compliant ISO/IEC 11801 Class D and ANSI/TIA-568.2-D requirements for category 5E performance. The outer jacket material made from LSZH compound to reduce the amount of toxic smoke and corrosive emissions during burning, for users' safety as well as to increase the safety of firefighting operations.

### Drawing



### Technical Standards

- ANSI/TIA-568.2-D Category 5E
- ANSI/TIA-568-C.2 Category 5E
- ISO/IEC 11801:2017 class D
- EN 50173-1 Category 5E
- EN 50288-3-1
- IEC 61156-5, IEC 60332-1
- IEC 60754-1, IEC 60754-2
- IEC 61034-1, IEC 61034-2
- ICEA S-90-661 Category 5E
- ASTM D4566-98
- NEMA WC 63.1
- UL 444
- CSA 22.2 No.214
- 3P Verified to Category 5E
- 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>	24 AWG
<b>Insulation</b>	<b>Material</b>	High Density Polyethylene (HDPE)
	<b>Diameter</b>	0.87 ±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>Rip cord</b>		Under Jacket
<b>Jacket</b>	<b>Material</b>	Lead free, FR-LSZH
	<b>Thickness</b>	0.51 ±0.02 mm
	<b>Color</b>	White
<b>Cable Diameter</b>		5.0 ±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 ± 15 Ohms, 1 MHz to 350 MHz
<b>Mutual Capacitance</b>	≤ 5.6 nF Max / 100m
<b>Capacitance, Unbalance</b>	≤ 160 pF Max / 100m
<b>DC Resistance</b>	≤ 9.38ohm 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 @350MHz
<b>Delay Skew</b>	≤ 25 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 5E)

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
0.772	1.8	79	82	77.2	80.2	77	79	75.2	77.2	70	73	67	69	-	-
1	2	77	80	75	78.3	75	77	73	75.3	68	71	65	67	20	28
4	3.8	68	71	64.2	67.5	66	68	62.2	64.5	56	59	53	55	23	31
8	5.3	64	67	58.7	61.4	62	64	56.7	58.4	50	53	47	49	24.5	32.5
10	6	62	65	56	59.3	60	62	54	56.3	48	51	45	47	25	33
16	7.6	59	62	51.4	54.7	57	59	49.4	51.7	44	47	41	43	25	33
20	8.5	58	61	49.5	52.3	56	58	47.5	49.3	42	45	39	41	25	33
25	9.5	56	59	46.5	49.8	54	56	44.5	46.8	40	43	37	39	24.3	32.3
31.25	10.7	55	58	44.3	47.2	53	55	42.3	44.2	38	41	35	37	23.6	31.6
62.5	15.4	50	53	34.6	37.9	48	50	32.6	34.9	32	35	29	31	21.5	29.5
100	19.8	47	50	27.2	30.4	45	47	25.2	27.4	28	31	25	27	20.1	28.1
155	25.3	44	47	18.7	22.1	42	44	16.7	19.1	24	27	21	23	18.8	26.8
200	29	43	46	14	16.6	41	43	12	13.6	22	25	19	21	18	26
250	32.8	41	44	8.2	11.3	39	41	6.2	8.3	20	23	17	19	17.3	25.3
300	36.6	40	43	3.4	6.5	38	40	1.4	3.5	18	21	15	17	16.8	24.8
350	40	39	42	-	2.1	37	39	-	-	17	20	14	16	16.3	24.3

## Applications

- Structure cabling for building backbone
- Structure cabling for horizontal
- 2.5G BASE-T (IEEE 802.3bz)
- 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-9015LSZH	Category 5E, 4 Pairs, U/UTP Enhanced Cable, 24AWG, LSZH, 350 MHz	White	305 m	Pull Box
US-9015LSZH-1	Category 5E, 4 Pairs, U/UTP Enhanced Cable, 24AWG, LSZH, 350 MHz	White	100 m	Color Box

\*Other jacket color available on request

Specifications subject to change without notice.

© 2023 LINK CORP. ALL RIGHTS RESERVED

www.linkcable.com

US-9015LSZH-V1.0-050124