



US-9035

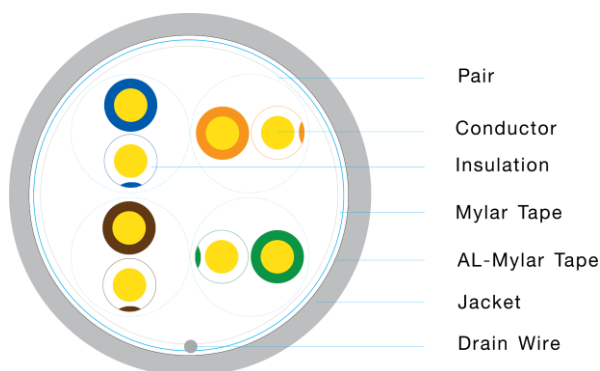
LINK AMERICAN STANDARD



Scope of Applications

This specification covers the general requirements for FTP cable used for indoor installation. LINK Ultra Category 5E F/UTP cables compliant ISO/IEC 11801 Class D and ANSI/TIA-568.2-D requirements for category 5E performance. These cables are characterized to 350MHz, Powersum NEXT tested. The cable covered under UL certification which the UL mark E197771 appearing on the cable jacket.

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 50288-2-1
- IEC 61156-5
- ICEA S-90-661 Category 5E
- ASTM D4566-98
- UL 444 / NEC Article 800
- UL 1666
- CSA 22.2 No.214
- 3P Verified to Category 5E
- Approvals UL listed file no. E197771
- RoHS Compliant

Cable Construction

Conductor	Material	Solid bare copper
	No. of Conductor	4 Pairs (8 wires)
	Diameter	24 AWG
Insulation	Material	High Density Polyethylene (HDPE)
	Diameter	1.02 ±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
Mylar Tape	Thickness	0.025 mm
Drain wire	Material	Tinned annealed copper
	Diameter	24 AWG
Shielded	Material	AL-Mylar Tape
	Thickness	0.065 mm
Rip cord		Under Jacket
Jacket	Material	Lead free, FR-PVC
	Thickness	0.51 ±0.05mm.
	Color	White
Cable Diameter		6.1 ±0.2mm.
Marking	Pkg. 1000Ft (305 m)	Black color in every 2 ft
Flame Rating		CMR

Electrical Characteristic

Impedance	100 ± 15 Ohms, 1 MHz to 350 MHz
Mutual Capacitance	≤ 5.6 nF Max / 100m
Capacitance, Unbalance	≤ 160 pF Max / 100m
DC Resistance	≤ 9.38ohm 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 @100MHz
Delay Skew	≤ 25 ns Max
NVP	69%

Physical Properties

Tensile Strength	110 N (25 lbf)	
Ultimate Breaking Strength	>400 N (90lbf)	
Min. Bending Radius	8 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 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-9035	CAT 5E F/UTP Enhanced CABLE (350 MHz), CMR, UL	White	305 m	Reel

*Other jacket color available on request

Specifications subject to change without notice.

© 2023 LINK CORP. ALL RIGHTS RESERVED

www.linkcable.com

US-9035-V1.0-050124