Liberty

TECHNICAL SPECIFICATIONS

# Category Cable

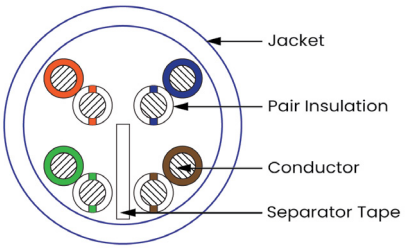
## Cat 6E UTP Plenum

**PART NUMBER:** L6EP CC L XX

See part legend below

## DESCRIPTION:

23 AWG 4 Pair UTP OFC Category 6 Plenum Cable




| Conductor | |
|---|---|
| Assembly | 4 pair twisted (8 conductors) |
| Material | Oxygen Free Copper |
| Copper Size | 23 AWG (Solid) |
| Diameter | 0.022 in : 0.57 mm |

| Pair Identification | |
|---|---|
| Pair 1 | Blue/White: co-extruded blue stripe on white single |
| Pair 2 | Orange/White: co-extruded orange stripe on white single |
| Pair 3 | Green/White: co-extruded green stripe on white single |
| Pair 4 | Brown/White: co-extruded brown stripe on white single |

| Insulation | |
|---|---|
| Material | Perfluoroethylene Propylene (FEP) |

| Jacket | |
|---|---|
| Material | Low Smoke Polyvinyl Chloride (LSPVC) |
| Thickness | 0.019 in. : 0.48 mm |
| Overall Diameter | 0.215 in. : 5.46 mm |
| Rip Cord | No |

| Industry Approvals | |
|---|---|
| ANSI/TIA-568 Category 6 | |
| ISO/IEC 11801 Class E | |
| National Electric Code® | Article 800 |
| UL Standard 444 | Type CMP |
| EU RoHS III 2015/863/EU Compliant | |

| Electrical Performance | |
|---|---|
| DC Resistance (68° F : 20° C) | ≤ 6.66 Ω / 100m |
| DC Resistance Unbalance | 2,5% Max |
| Characteristic Impedance | 100 Ω ± 15 Ω |
| Capacitance | 4.6 nF / 100m |
| Operation Temperature | -4° F to 140° F : -20° C to 60° C |
| Maximum Skew | 45ns / 100m |
| Velocity of Propagation | 73% |

| Mechanical Characterics | |
|---|---|
| Pull Tension | 25 Lbs. : 111 N |
| Installation Temperature | 32° F to 140° F : 0° C to 60° C |

## PART LEGEND

| Jacket Color (CC) | | | |
|---|---|---|---|
| **BK** | Black | **PK** | Pink |
| **BL** | Blue | **PR** | Purple |
| **GY** | Gray | **RD** | Red |
| **GN** | Green | **WH** | White |
| **OR** | Orange | **YL** | Yellow |

| Length (L) | | | |
|---|---|---|---|
| **5** | 500' | **20** | 2000' |
| **1** | 1000' | **25** | 2500' |
| **15** | 1500' | | |

| Put-up (XX) | |
|---|---|
| **BX** | Pull Box |
| **RL** | Reel |
| **CP** | Coil Pack |





*240099D014*
*D240917-VF*

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## TECHNICAL SPECIFICATIONS

## ANSI/TIA 568 CATEGORY 6 (SWEPT FREQUENCIES TO 550 MHZ)

Electrical Performance:

| Frequency (MHz) | IL Max. | NEXT Min. | PS. NEXT Min. | ACR Min. | PS. ACR Min. | ACRF Min. | PS. ACRF Min. | RL Min. |
|---|---|---|---|---|---|---|---|---|
| | dB/100min | | | | | | | |
| 1.0 | 2.0 | 74.3 | 72.3 | 72.3 | 70.3 | 67.8 | 64.8 | 20.0 |
| 4.0 | 3.8 | 65.3 | 63.3 | 61.5 | 59.5 | 55.8 | 52.8 | 23.0 |
| 8.0 | 5.3 | 60.8 | 58.8 | 55.4 | 53.4 | 49.7 | 46.7 | 24.5 |
| 10.0 | 6.0 | 59.3 | 57.3 | 53.3 | 51.3 | 47.8 | 44.8 | 25.0 |
| 16.0 | 7.6 | 56.2 | 54.2 | 48.7 | 46.7 | 43.7 | 40.7 | 25.0 |
| 20.0 | 8.5 | 54.8 | 52.8 | 46.3 | 44.3 | 41.8 | 38.8 | 25.0 |
| 25.0 | 9.5 | 53.3 | 51.3 | 43.8 | 41.8 | 39.8 | 36.8 | 24.3 |
| 31.3 | 10.7 | 51.9 | 49.9 | 41.2 | 39.2 | 37.9 | 34.9 | 23.6 |
| 62.5 | 15.4 | 47.4 | 45.4 | 32.0 | 30.0 | 31.9 | 28.9 | 21.5 |
| 100.0 | 19.8 | 44.3 | 42.3 | 24.5 | 22.5 | 27.8 | 24.8 | 20.1 |
| 155.0 | 25.2 | 41.4 | 39.4 | 16.2 | 14.2 | 24.0 | 21.0 | 18.8 |
| 200.0 | 29.0 | 39.8 | 37.8 | 10.7 | 8.7 | 21.8 | 18.8 | 18.0 |
| 250.0 | 32.8 | 38.3 | 36.3 | 5.4 | 3.4 | 19.8 | 16.8 | 17.3 |
| 350.0 | 39.7 | 37.1 | 34.1 | -3.6 | -5.6 | 16.9 | 13.9 | NS |
| 400.0 | 42.9 | 36.3 | 33.3 | -7.6 | -9.6 | 15.8 | 12.7 | NS |
| 550.0 | 51.4 | 36.2 | 34.2 | NS | NS | 14.0 | 10.9 | NS |

* All tests include swept frequency measurements

Values above 250 MHz are for information purposes only





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