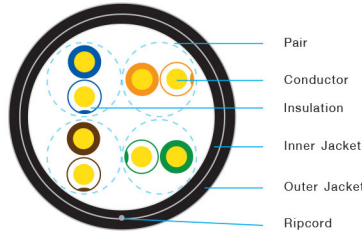


## STANDARD

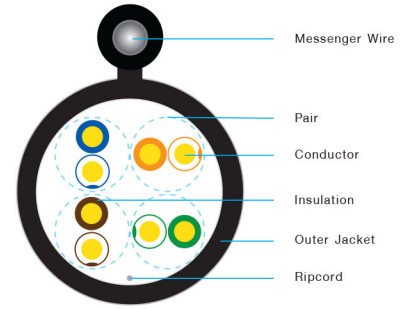
- ANSI/TIA-568.2-D Category 5E
- ISO/IEC 11801:2017 Class D
- EN 50173-1 Category 5E
- ICEA S-90-661 Category 5E
- EN 50288-3-1, NEMA WC 63.1
- IEC 61156-5
- UL444
- RoHS Compliant

## APPLICATION

- 2.5G BASE-T (IEEE 802.3bz)
- 10/100/1000 BASE-T (IEEE 802.3i/u/ab)
- IEEE 802.3af/at (PoE/PoE+)
- 52/155/622 Mbps and 1.2 Gbps ATM
- 4/16 Mbps Token Ring
- TP-PMD, TPDDI, ISDN, CDDI, VoIP
- HD BaseT 2.0 standard, Baseband, Broadband
- Digital & Analog for data, video and audio application



US-9045



US-9015M



## ELECTRICAL CHARACTERS

|                                |                             |
|--------------------------------|-----------------------------|
| <b>Impedance</b>               | : 100±15Ω, 1 MHz to 350 MHz |
| <b>Mutual Capacitance</b>      | : 5.6 nFMax / 100m          |
| <b>Capacitance,Unbalance</b>   | : 160 pF Max / 100m         |
| <b>DC Resistance</b>           | : 9.38 ohm Max/100m         |
| <b>DC Resistance,Unbalance</b> | : 5% Max.                   |
| <b>Insulated Resistance</b>    | : 5000 MΩ/Km                |
| <b>Dielectric Strength</b>     | : 1kV/min                   |
| <b>Propagation Delay</b>       | : 536 ns/100m Max @350MHz   |
| <b>Delay Skew</b>              | : 25 ns Max                 |

## CONSTRUCTION / MATERIAL

|                       |  |
|-----------------------|--|
| <b>Conductor</b>      | : 24AWG Solid Bare Copper                  |
| <b>Insulation</b>     | : HDPE                                     |
| <b>Ripcord</b>        | : Under Jacket                             |
| <b>Inner Jacket</b>   | : Lead Free, FR PVC for US-9045            |
| <b>Outer Jacket</b>   | : UV-Proof, PE                             |
| <b>Messenger Wire</b> | : Galvanize Steel Wire, 1.3mm for US-9015M |

| FREQUENCY (MHZ) | INSERTION LOSS (dB/100m) | NEXT MIN.(dB) | ACR-N MIN.(dB) | PS NEXT MIN.(dB) | PS ACR-N MIN.(dB) | ACR-F MIN.(dB/100m) | PS ACR-F MIN.(dB/100m) | RL MIN.(dB) |
|-----------------|--------------------------|---------------|----------------|------------------|-------------------|---------------------|------------------------|-------------|
| 1               | 2.0                      | 77            | 75             | 75               | 73                | 68                  | 65                     | 20.0        |
| 25              | 9.5                      | 56            | 46.5           | 54               | 44.5              | 40                  | 37                     | 24.3        |
| 31.25           | 10.7                     | 55            | 44.3           | 53               | 42.3              | 38                  | 35                     | 23.6        |
| 62.5            | 15.4                     | 50            | 34.6           | 48               | 32.6              | 32                  | 29                     | 21.5        |
| 100             | 19.8                     | 47            | 27.2           | 45               | 25.2              | 28                  | 25                     | 20.1        |
| 155             | 25.3                     | 44            | 18.7           | 42               | 16.7              | 24                  | 21                     | 18.8        |
| 200             | 29                       | 43            | 14             | 41               | 12                | 22                  | 19                     | 18.0        |
| 250             | 32.8                     | 41            | 8.2            | 39               | 6.2               | 20                  | 17                     | 17.3        |
| 300             | 36.6                     | 40            | 3.4            | 38               | 1.4               | 18                  | 15                     | 16.8        |
| 350             | 40                       | 39            | -              | 37               | -                 | 17                  | 14                     | 16.3        |

## MECHANICAL PROPERTIES

**Minimum Bending Radius**

Installation 8 X Cable Diameter

**Tensile Strength**

Operation 4 X Cable Diameter

9.7 MPa (1400 PSI) for US-9045

16.5 MPa (2400 PSI) for US-9015M

**Installation / Operating temperature**

-40°C to 75°C

**Storage Temperature**

-40°C to 80°C

| Part No.   | Cable Type | Conductor               | Jacket    | Diameter (mm.) | Color | Packaging        |
|------------|------------|-------------------------|-----------|----------------|-------|------------------|
| US-9045    | Outdoor    | 24AWG Solid Bare Copper | FR-PVC/PE | 6.3            | Black | 305m/Reelex      |
| US-9015M   | Outdoor    | 24AWG Solid Bare Copper | PE        | 5.0            | Black | 305m/Reel in Box |
| US-9045-1  | Outdoor    | 24AWG Solid Bare Copper | FR-PVC/PE | 6.3            | Black | 100m/Reelex      |
| US-9015M-1 | Outdoor    | 24AWG Solid Bare Copper | PE        | 5.0            | Black | 100m/Reel in Box |