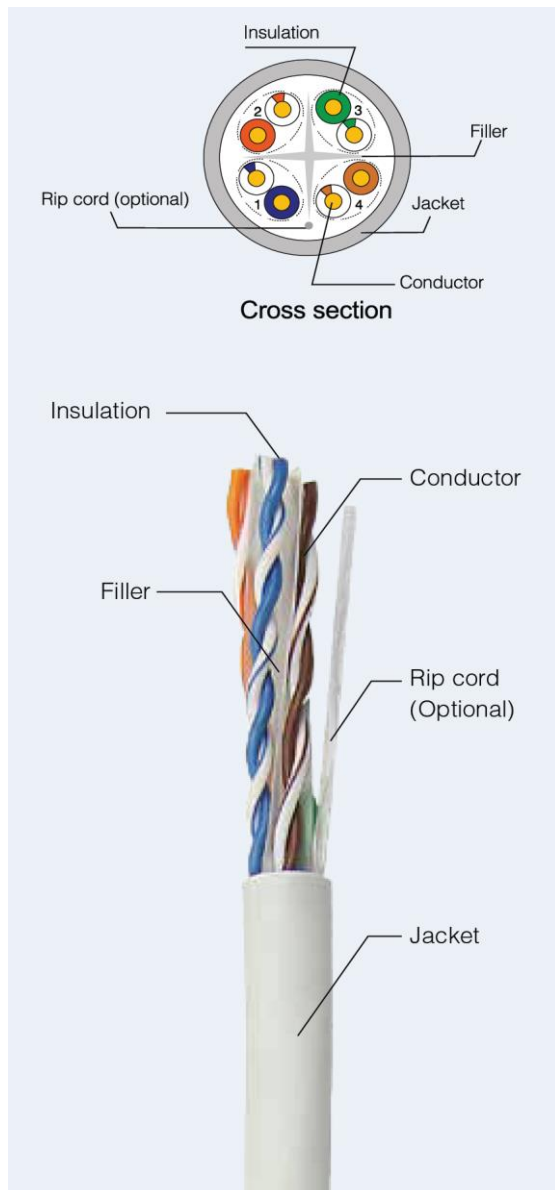


Description

- Rated temperature: 75°C
- Reference standard: UL444, ANSI/TIA-568-C.2 ISO/IEC 11801 Class Ea, IEC 61156-5 Product standard certification:
- Flame test: CMX
- Oxygen free copper conductor
- Colour-coded PE insulation
- PVC jacket

Product figure



Application

- 100Base-T4
- 100Base-TX
- 100VG-AnyLAN
- 1000Base-T
- 1000Base-TX
- 155Mbps ATM
- 622Mbps ATM
- 10 Gigabit Ethernet & designed for applications up to 500MHz
- Meets the performance requirements of IEEE 802.3an

Physical characteristics

| | | |
|----------------------------|---|----------------------------|
| Structure | Construction | U/UTP |
| | Number of Pairs | 4 Pairs |
| Conductor | AWG | 23 AWG |
| | Conductor material | Solid bare copper |
| | Conductor dimension | 0.58±0.02 mm |
| Insulation | Insulation material | PE |
| | Insulation dimension | 1.06±0.06mm |
| | Number colour (Stripe or pure marking) | 1.White/Blue & Blue |
| | | 2.White/Orange & Orange |
| 3.White/Green & Green | | |
| 4.White/Brown & Brown | | |
| Cabling | Twisting lay length | ≤30mm |
| | Cabling lay length | ≤200mm |
| Filler | Filler material | PE |
| Binder | Binder material | N/A |
| Shield | Individual shield & material | N/A |
| | Primary overall shield & material | N/A |
| | Secondary overall shield & material | N/A |
| | Shield coverage approx | N/A |
| | Drain wire | N/A |
| Outer jacket | Jacket material | PVC |
| | Jacket thickness nominal | 0.50mm |
| | Overall nominal dimension | 6.40 ±0.30 mm |
| | Jacket color | Per customer request |
| | Jacket rip cord | None |
| Mechanical characteristics | Operating temperature range | -20 °C ~ +75 °C |
| | Bulk cable weight approx | 47.0 kg/km |
| | Max. recommended pulling tension | 110 N |
| | Min. bend radius (install) | 8 x O.D. |
| | Outer jacket tensile strength | ≥ 9.0MPa |
| | Outer jacket elongation | ≥ 100% |
| | Outer jacket aging condition | 100 °C x 168 hrs |
| | After aging, tensile strength | ≥ 70% of Unaging |
| | After aging, elongation | ≥ 50% of Unaging |
| | Cold bend (static) | No Crack (@ -20°C x 4hrs) |
| Electrical Characteristics | Nom. mutual capacitance | ≤5.6 nF/100m (@1kHz) |
| | Pair to ground capacitance unbalance | ≤ 330 pF/100m |
| | Nominal velocity of propagation | 66% |
| | Max. delay skew | 45 ns/100m |
| | Max. conductor DC resistance | 9.5 Ω/100m (@ 20 °C) |
| | Max. conductor resistance unbalance | 5% (@ 20 °C) within a pair |
| | Min. insulation resistance | 5000 MΩ.km |
| | Max. operating voltage - UL | 300 V |
| | Dielectric strength | 2.5 kV d.c. for 2 s |
| | (Conductor/conductor, conductor/screen) | Or 1,0 kV d.c. for 1 min |

Cable Jacket Marking

| | |
|--|--|
| | |
|--|--|

Electrical Characteristics

| Frequency | Character impedance upper limit | Character impedance lower limit | RL | ATT | NEXT | PS NEXT | ELFEXT | PS ELFEXT | PD | | | |
|-----------|---------------------------------|---------------------------------|----------|-----------|----------|----------|----------|-----------|---------------|--|--|--|
| (MHz) | (Ω) | (Ω) | (dB Min) | (dB/100m) | (dB Min) | (dB Min) | (dB Min) | (dB Min) | (ns/100m Max) | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | | |
| 4 | 115.2 | 86.8 | 23.0 | 3.80 | 66.3 | 63.3 | 56.0 | 53.0 | 552.0 | | | |
| 8 | 112.6 | 88.8 | 24.5 | 5.31 | 61.8 | 58.8 | 49.9 | 46.9 | 546.7 | | | |
| 10 | 11.9 | 89.4 | 25.0 | 5.93 | 60.3 | 57.3 | 48.0 | 45.0 | 545.4 | | | |
| 16 | 111.9 | 89.4 | 25.0 | 7.49 | 57.2 | 54.2 | 43.9 | 40.9 | 543.0 | | | |
| 20 | 111.9 | 89.4 | 25.0 | 8.38 | 55.8 | 52.8 | 42.0 | 39.0 | 542.0 | | | |
| 25 | 112.9 | 88.5 | 24.3 | 9.38 | 54.3 | 51.3 | 40.0 | 37.0 | 541.2 | | | |
| 31.25 | 114.1 | 87.7 | 23.6 | 10.50 | 52.9 | 49.9 | 38.1 | 35.1 | 540.4 | | | |
| 62.5 | 118.3 | 84.5 | 21.5 | 14.99 | 48.4 | 45.4 | 32.1 | 29.1 | 538.6 | | | |
| 100 | 121.9 | 82.0 | 20.1 | 19.14 | 45.3 | 42.3 | 28.0 | 25.0 | 537.6 | | | |
| 150 | 125.7 | 79.6 | 18.9 | 23.68 | 42.7 | 39.7 | 24.5 | 21.5 | 536.9 | | | |
| 200 | 128.8 | 77.6 | 18.0 | 27.58 | 40.8 | 37.8 | 22.0 | 19.0 | 536.5 | | | |
| 250 | 131.5 | 76.0 | 17.3 | 31.07 | 39.3 | 36.3 | 20.0 | 17.0 | 536.3 | | | |
| 300 | 131.6 | 76.0 | 17.3 | 34.27 | 38.1 | 35.1 | 18.5 | 15.5 | 536.1 | | | |
| 350 | 131.6 | 76.0 | 17.3 | 37.25 | 37.1 | 34.1 | 17.1 | 14.1 | 535.9 | | | |
| 400 | 131.6 | 76.0 | 17.3 | 40.05 | 36.3 | 33.3 | 16.0 | 13.0 | 535.8 | | | |
| 500 | 131.6 | 76.0 | 17.3 | 45.26 | 34.8 | 31.8 | 14.0 | 11.0 | 535.6 | | | |

Remark : Cable that meet the requirements of the template are not required to be measured for return loss; alternately cables that meet the return loss requirements are not required to be measured for characteristic impedance.

Revision history:

V1.0 Initial release 2020/6/11