

Product Classification

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|--------------|--------------------|
| Portfolio | NETCONNECT® |
| Product Type | Twisted pair cable |

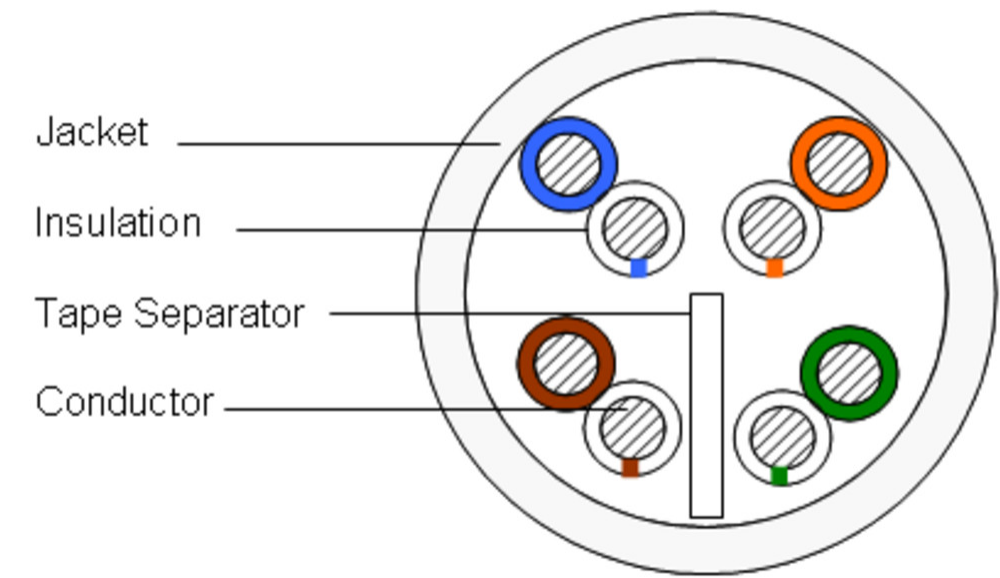
General Specifications

| | |
|-------------------------|--|
| Product Number | CS34P |
| ANSI/TIA Category | 6 |
| Cable Component Type | Horizontal |
| Cable Type | U/UTP (unshielded) |
| Conductor Type, singles | Solid |
| Conductors, quantity | 8 |
| Jacket Color | White |
| Note | All electrical transmission tests include swept frequency measurements |
| Pairs, quantity | 4 |
| Separator Type | Tape separator |
| Transmission Standards | ANSI/TIA-568.2-D CENELEC EN 50288-6-1 ISO/IEC 11801 Class E |

Dimensions

| | |
|-----------------------------------|---------------------|
| Cable Length | 304.8 m 1000 ft |
| Diameter Over Insulated Conductor | 0.978 mm 0.038 in |
| Diameter Over Jacket, nominal | 5.461 mm 0.215 in |
| Jacket Thickness | 0.533 mm 0.021 in |
| Conductor Gauge, singles | 23 AWG |

Cross Section Drawing



Electrical Specifications

| | |
|---------------------------------------|---|
| Characteristic Impedance | 100 ohm |
| dc Resistance Unbalance, maximum | 5 % |
| dc Resistance, maximum | 8 ohms/100 m 2.438 ohms/100 ft |
| Delay Skew, maximum | 45 ns |
| Dielectric Strength, minimum | 1500 Vac 2500 Vdc |
| Mutual Capacitance at Frequency | 5.6 nF/100 m @ 1 kHz |
| Nominal Velocity of Propagation (NVP) | 75 % |
| Operating Frequency, maximum | 250 MHz |
| Operating Voltage, maximum | 80 V |
| Remote Powering | Fully complies with the recommendations set forth by IEEE 802.3bt (Type 4) for the safe delivery of power over LAN cable when installed according to ISO/IEC 14763-2, CENELEC EN 50174-1, CENELEC EN 50174-2 or TIA TSB-184-A |
| Safety Voltage Rating | 300 V |

Electrical Cable Performance

| | | | |
|--------|---|--------|---|
| CS | CommScope | | |
| STD | Refers to the standard value listed under Transmission Standards in the Electrical Specifications above | | |
| TYP | Typical Electrical Performance | | |
| IL | Insertion Loss (dB/100m) | NEXT | Near End Crosstalk (dB/100m) |
| ACR | Attenuation to Crosstalk Ratio (dB/100m) | PSNEXT | Power Sum Near End Crosstalk (db/100m) |
| PSACR | Power Sum Attenuation to Crosstalk Ratio (dB/100m) | ACRF | Attenuation to Crosstalk Ratio - Far End (dB/100m) |
| PSACRF | Power Sum Attenuation to Crosstalk Ratio - Far End (dB/100m) | RL | Return Loss (dB) |
| TCL | Transverse Conversion Loss (dB/100m) | ELTCTL | Equal Level Transverse Conversion Transfer Loss (dB/100m) |

| Freq. MHz | IL | | | NEXT | | | ACR | | | PSNEXT | | | PSACR | | | ACRF | | | PSACRF | | | RL | | |
|--------------|------|------|------|------|------|------|------|------|-------|--------|------|------|-------|------|-------|------|------|------|--------|------|------|------|------|------|
| | CS | STD | TYP | CS | STD | TYP | CS | STD | TYP | CS | STD | TYP | CS | STD | TYP | CS | STD | TYP | CS | STD | TYP | CS | STD | TYP |
| 1 | 2 | 2 | 1.8 | 75.3 | 74.3 | 89.3 | 73.3 | 72.3 | 87.6 | 72.3 | 72.3 | 87 | 70.3 | 70.3 | 85.3 | 68 | 67.8 | 84.3 | 65 | 64.8 | 82.4 | 20 | 20 | 34 |
| 4 | 3.8 | 3.8 | 3.5 | 66.3 | 65.3 | 80 | 62.5 | 61.5 | 76.5 | 63.3 | 63.3 | 77.7 | 59.5 | 59.5 | 74.1 | 56 | 55.8 | 72.6 | 53 | 52.8 | 70.8 | 23 | 23 | 33.9 |
| 8 | 5.3 | 5.3 | 5 | 61.8 | 60.8 | 75.5 | 56.4 | 55.4 | 70.5 | 58.8 | 58.8 | 73.2 | 53.4 | 53.4 | 68.2 | 49.9 | 49.7 | 66.8 | 46.9 | 46.7 | 64.9 | 24.5 | 24.5 | 35.5 |
| 10 | 6 | 6 | 5.6 | 60.3 | 59.3 | 73.9 | 54.3 | 53.3 | 68.3 | 57.3 | 57.3 | 71.5 | 51.3 | 51.3 | 65.9 | 48 | 47.8 | 64.9 | 45 | 44.8 | 63 | 25 | 25 | 36.5 |
| 16 | 7.6 | 7.6 | 7.2 | 57.2 | 56.2 | 70.6 | 49.7 | 48.7 | 63.4 | 54.2 | 54.2 | 68.3 | 46.7 | 46.7 | 61.1 | 43.9 | 43.7 | 60.8 | 40.9 | 40.7 | 58.9 | 25 | 25 | 37.6 |
| 20 | 8.5 | 8.5 | 8.1 | 55.8 | 54.8 | 69.2 | 47.3 | 46.3 | 61.2 | 52.8 | 52.8 | 66.9 | 44.3 | 44.3 | 58.8 | 42 | 41.8 | 58.9 | 39 | 38.8 | 56.9 | 25 | 25 | 38.2 |
| 25 | 9.5 | 9.5 | 9 | 54.3 | 53.3 | 67.6 | 44.8 | 43.8 | 58.6 | 51.3 | 51.3 | 65.3 | 41.8 | 41.8 | 56.2 | 40 | 39.8 | 57 | 37 | 36.8 | 55 | 24.3 | 24.3 | 38.2 |
| 31.25 | 10.7 | 10.7 | 10.1 | 52.9 | 51.9 | 66.3 | 42.2 | 41.2 | 56.1 | 49.9 | 49.9 | 63.9 | 39.2 | 39.2 | 53.8 | 38.1 | 37.9 | 55 | 35.1 | 34.9 | 53 | 23.6 | 23.6 | 38.3 |
| 62.5 | 15.4 | 15.4 | 14.5 | 48.4 | 47.4 | 61.4 | 33 | 32 | 46.9 | 45.4 | 45.4 | 59 | 30 | 30 | 44.5 | 32.1 | 31.9 | 48.9 | 29.1 | 28.9 | 46.9 | 21.5 | 21.5 | 34.7 |
| 100 | 19.8 | 19.8 | 18.6 | 45.3 | 44.3 | 58.1 | 25.5 | 24.5 | 39.5 | 42.3 | 42.3 | 55.7 | 22.5 | 22.5 | 37.1 | 28 | 27.8 | 44.7 | 25 | 24.8 | 42.8 | 20.1 | 20.1 | 31.6 |
| 155 | 25.2 | 25.2 | 23.5 | 42.4 | 41.4 | 55.7 | 17.3 | 16.3 | 32.2 | 39.4 | 39.4 | 53 | 14.3 | 14.3 | 29.5 | 24.2 | 24 | 41 | 21.2 | 21 | 39 | 18.8 | 18.8 | 29.6 |
| 200 | 29 | 29 | 26.9 | 40.8 | 39.8 | 52.6 | 11.8 | 10.8 | 25.7 | 37.8 | 37.8 | 50.4 | 8.8 | 8.8 | 23.4 | 22 | 21.8 | 38.6 | 19 | 18.8 | 36.7 | 18 | 18 | 29.3 |
| 250 | 32.8 | 32.8 | 30.3 | 39.3 | 38.3 | 50.8 | 6.5 | 5.5 | 20.5 | 36.3 | 36.3 | 48.6 | 3.5 | 3.5 | 18.3 | 20 | 19.8 | 36.5 | 17 | 16.8 | 34.7 | 17.3 | 17.3 | 28.8 |
| 300 | | | 33.5 | | | 49 | | | 15.6 | | | 46.8 | | | 13.4 | | | 34.5 | | | 32.6 | | | 28.9 |
| 350 | | | 36.4 | | | 47.6 | | | 11.2 | | | 45.4 | | | 9 | | | 33 | | | 31 | | | 29 |
| 400 | | | 39 | | | 46.3 | | | 7.3 | | | 44.1 | | | 5.1 | | | 31.3 | | | 29.3 | | | 30.3 |
| 500 | | | 44.3 | | | 43.2 | | | -1.1 | | | 41.2 | | | -3.1 | | | 27.3 | | | 25.5 | | | 31 |
| 550 | | | 44.6 | | | 43.1 | | | -0.5 | | | 41.2 | | | -2.5 | | | 27.4 | | | 25.5 | | | 31 |
| 650 | | | 51.3 | | | 40.2 | | | -11.1 | | | 38.4 | | | -12.9 | | | 22.3 | | | 20.4 | | | 25 |

Material Specifications

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|---------------------|------------------|
| Conductor Material | Bare copper |
| Insulation Material | FEP Polyolefin |
| Jacket Material | PVC |
| Separator Material | FEP |

Mechanical Specifications

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| Pulling Tension, maximum | 11.34 kg 25 lb |
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Environmental Specifications

874019904/10 | CS34P WHT C6 4/23 U/UTP RL 1KFT

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|--------------------------|--|
| Installation temperature | 0 °C to +60 °C (+32 °F to +140 °F) |
| Operating Temperature | -20 °C to +60 °C (-4 °F to +140 °F) |
| Environmental Space | Plenum |
| Flame Test Method | CMP/FT6 NEC Article 800 NFPA 262 UL 444 UL 910 |
| Smoke Test Method | CMP/FT6 |

Packaging and Weights

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|----------------|----------------------------|
| Cable weight | 38.395 kg/km 25.8 lb/kft |
| Packaging Type | Reel |