

CS34R ETL Verified Category 6 U/UTP Cable, non-plenum, orange jacket, 4 pair count, 3000 ft (914 m) length, reel

## Product Classification

|                              |  |
|------------------------------|--|
| <b>Regional Availability</b> | Asia   Australia/New Zealand   Latin America |
| <b>Portfolio</b>             | NETCONNECT®                                  |
| <b>Product Type</b>          | Twisted pair cable                           |

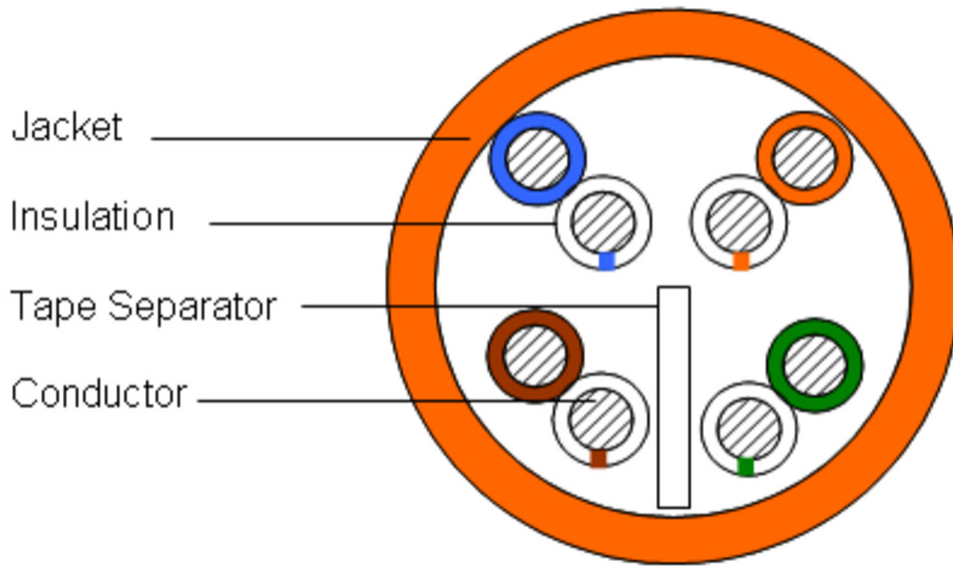
## General Specifications

|                                |  |
|--------------------------------|--|
| <b>Product Number</b>          | CS34R  |
| <b>ANSI/TIA Category</b>       | 6  |
| <b>Cable Component Type</b>    | Horizontal   |
| <b>Cable Type</b>              | U/UTP (unshielded)   |
| <b>Conductor Type, singles</b> | Solid  |
| <b>Conductors, quantity</b>    | 8  |
| <b>Jacket Color</b>            | Orange   |
| <b>Note</b>                    | All electrical transmission tests include swept frequency measurements |
| <b>Pairs, quantity</b>         | 4  |
| <b>Separator Type</b>          | Tape separator   |
| <b>Transmission Standards</b>  | ANSI/TIA-568.2-D   CENELEC EN 50288-6-1   ISO/IEC 11801 Class E        |

## Dimensions

|  |                     |
|--|---------------------|
| <b>Cable Length</b>                      | 914.4 m   3000 ft   |
| <b>Cable Length Tolerance</b>            | ±5%                 |
| <b>Diameter Over Insulated Conductor</b> | 1.054 mm   0.041 in |
| <b>Diameter Over Jacket, nominal</b>     | 5.588 mm   0.22 in  |
| <b>Jacket Thickness</b>                  | 0.508 mm   0.02 in  |
| <b>Conductor Gauge, singles</b>          | 23 AWG              |

## Cross Section Drawing



## Electrical Specifications

|  |   |
|--|---|
| <b>Characteristic Impedance</b>              | 100 ohm   |
| <b>dc Resistance Unbalance, maximum</b>      | 5 %   |
| <b>dc Resistance, maximum</b>                | 8 ohms/100 m   2.438 ohms/100 ft  |
| <b>Delay Skew, maximum</b>                   | 30 ns   |
| <b>Dielectric Strength, minimum</b>          | 1500 Vac   2500 Vdc   |
| <b>Mutual Capacitance at Frequency</b>       | 5.6 nF/100 m @ 1 kHz  |
| <b>Nominal Velocity of Propagation (NVP)</b> | 69 %  |
| <b>Operating Frequency, maximum</b>          | 250 MHz   |
| <b>Operating Voltage, maximum</b>            | 80 V  |
| <b>Remote Powering</b>                       | 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 |
| <b>Safety Voltage Rating</b>                 | 300 V   |

## Electrical Cable Performance

|               |   |               |   |
|---------------|---|---------------|---|
| <b>CS</b>     | CommScope   | <b>NEXT</b>   | Near End Crosstalk (dB/100m)                              |
| <b>STD</b>    | Refers to the standard value listed under Transmission Standards in the Electrical Specifications above | <b>PSNEXT</b> | Power Sum Near End Crosstalk (db/100m)                    |
| <b>TYP</b>    | Typical Electrical Performance  | <b>ACRF</b>   | Attenuation to Crosstalk Ratio - Far End (dB/100m)        |
| <b>IL</b>     | Insertion Loss (dB/100m)  | <b>RL</b>     | Return Loss (dB)  |
| <b>ACR</b>    | Attenuation to Crosstalk Ratio (dB/100m)  | <b>ELTCTL</b> | Equal Level Transverse Conversion Transfer Loss (dB/100m) |
| <b>PSACR</b>  | Power Sum Attenuation to Crosstalk Ratio (dB/100m)  |               |   |
| <b>PSACRF</b> | Power Sum Attenuation to Crosstalk Ratio - Far End (dB/100m)  |               |   |
| <b>TCL</b>    | Transverse Conversion 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  | 49.8 | 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

|                            |             |
|----------------------------|-------------|
| <b>Conductor Material</b>  | Bare copper |
| <b>Insulation Material</b> | Polyolefin  |
| <b>Jacket Material</b>     | PVC         |
| <b>Separator Material</b>  | Polyolefin  |

## Mechanical Specifications

**Pulling Tension, maximum** 11.34 kg | 25 lb

## Environmental Specifications

# 884021084/30 | CS34R ORG C6 4/23 U/UTP RL 3KFT

---

|                                 |  |
|---------------------------------|--|
| <b>Installation temperature</b> | 0 °C to +60 °C (+32 °F to +140 °F)       |
| <b>Operating Temperature</b>    | -20 °C to +60 °C (-4 °F to +140 °F)      |
| <b>Environmental Space</b>      | Non-plenum                               |
| <b>Flame Test Method</b>        | CMR   NEC Article 800   UL 1666   UL 444 |

## Packaging and Weights

|                       |                             |
|-----------------------|-----------------------------|
| <b>Cable weight</b>   | 35.091 kg/km   23.58 lb/kft |
| <b>Packaging Type</b> | Reel                        |

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |