# UN884030784/30 | CS34R ORG C6 4/23 F/UTP RL 3KFT

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



#### **Product Classification**

Regional AvailabilityNorth AmericaPortfolioUniprise®

Product Type Twisted pair cable

General Specifications

Product Number CS34R
ANSI/TIA Category 6

Cable Component Type Horizontal

**Cable Type** F/UTP (shielded)

Conductor Type, singlesSolidConductors, quantity8Drain Wire TypeSolidJacket ColorOrange

Note All electrical transmission tests include swept frequency measurements

Pairs, quantity 4

Separator Type Isolator

Transmission Standards ANSI/TIA-568.2-D | CENELEC EN 50288-6-1 | ISO/IEC 11801 Class E

**Dimensions** 

 Cable Length
 914.4 m | 3000 ft

 Diameter Over Jacket, nominal
 7.315 mm | 0.288 in

 Jacket Thickness
 0.508 mm | 0.02 in

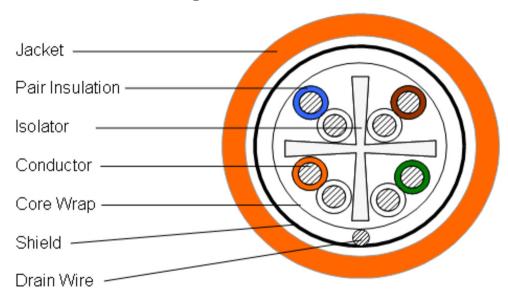
Conductor Gauge, singles23 AWGDrain Wire Gauge26 AWG

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## 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, minimum1500 Vac | 2500 VdcMutual Capacitance at Frequency5.6 nF/100 m @ 1 kHz

Nominal Velocity of Propagation (NVP) 68 %

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



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#### Flectrical 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.<br>MHz | IL   |      | NEXT |      | ACR  |      | PSNEXT |      | PSACR |      | ACRF |      | PSACRF |      | RL   |      |
|--------------|------|------|------|------|------|------|--------|------|-------|------|------|------|--------|------|------|------|
|              | STD  | TYP  | STD  | TYP  | STD  | TYP  | STD    | TYP  | STD   | TYP  | STD  | TYP  | STD    | TYP  | STD  | TYP  |
| 1            | 2    | 1.7  | 74.3 | 87.7 | 72.3 | 85.9 | 72.3   | 85.3 | 70.3  | 83.6 | 67.8 | 88.5 | 64.8   | 85.8 | 20   | 31.2 |
| 4            | 3.8  | 3.3  | 65.3 | 82   | 61.5 | 78.7 | 63.3   | 79.8 | 59.5  | 76.4 | 55.8 | 80.8 | 52.8   | 79   | 23   | 32.7 |
| 8            | 5.3  | 4.7  | 60.8 | 76.7 | 55.4 | 72   | 58.8   | 74.6 | 53.4  | 69.9 | 49.7 | 75   | 46.7   | 73.2 | 24.5 | 35.3 |
| 10           | 6    | 5.2  | 59.3 | 74.4 | 53.3 | 69.1 | 57.3   | 72.5 | 51.3  | 67.3 | 47.8 | 73   | 44.8   | 71.2 | 25   | 36.5 |
| 16           | 7.6  | 6.7  | 56.2 | 71.2 | 48.7 | 64.6 | 54.2   | 69.3 | 46.7  | 62.6 | 43.7 | 69.2 | 40.7   | 67.2 | 25   | 36.6 |
| 20           | 8.5  | 7.5  | 54.8 | 69.8 | 46.3 | 62.3 | 52.8   | 67.9 | 44.3  | 60.4 | 41.8 | 67.3 | 38.8   | 65.4 | 25   | 36.3 |
| 25           | 9.5  | 8.4  | 53.3 | 68.4 | 43.8 | 60.1 | 51.3   | 66.4 | 41.8  | 58.1 | 39.8 | 65.3 | 36.8   | 63.5 | 24.3 | 35.6 |
| 31.25        | 10.7 | 9.3  | 51.9 | 66.9 | 41.2 | 57.6 | 49.9   | 64.9 | 39.2  | 55.6 | 37.9 | 63.4 | 34.9   | 61.6 | 23.6 | 33.9 |
| 62.5         | 15.4 | 13.3 | 47.4 | 62.8 | 32   | 49.5 | 45.4   | 60.8 | 30    | 47.6 | 31.9 | 57.3 | 28.9   | 55.4 | 21.5 | 31.3 |
| 100          | 19.8 | 16.9 | 44.3 | 59   | 24.5 | 42.2 | 42.3   | 57.1 | 22.5  | 40.3 | 27.8 | 53.4 | 24.8   | 51.6 | 20.1 | 27.1 |
| 155          | 25.2 | 21.1 | 41.4 | 55.6 | 16.3 | 34.5 | 39.4   | 53.8 | 14.3  | 32.7 | 24   | 49.5 | 21     | 47.5 | 18.8 | 23.7 |
| 200          | 29   | 24.1 | 39.8 | 52.1 | 10.8 | 28   | 37.8   | 50.6 | 8.8   | 26.6 | 21.8 | 47.6 | 18.8   | 45.5 | 18   | 21.8 |
| 250          | 32.8 | 27   | 38.3 | 51.1 | 5.5  | 24.1 | 36.3   | 49.4 | 3.5   | 22.4 | 19.8 | 45.3 | 16.8   | 43.2 | 17.3 | 20.1 |
| 300          |      | 29.7 |      | 50.1 |      | 20.4 |        | 48.3 |       | 18.6 |      | 43.5 |        | 41.6 |      | 19.1 |
| 350          |      | 32.2 |      | 48.8 |      | 16.7 |        | 47   |       | 14.8 |      | 42.3 |        | 40.2 |      | 18.1 |
| 400          |      | 34.5 |      | 47.3 |      | 12.7 |        | 45.6 |       | 11   |      | 40.9 |        | 38.9 |      | 17.2 |
| 500          |      | 39   |      | 44   |      | 5    |        | 42.5 |       | 3.5  |      | 39   |        | 36.9 |      | 15.9 |
| 550          |      | 41.1 |      | 43.2 |      | 2.1  |        | 41.6 |       | 0.5  |      | 36.2 |        | 33.8 |      | 15.5 |
| 650          |      | 45   |      | 43.4 |      | -1.6 |        | 41.5 |       | -2.5 |      | 34.6 |        | 32.3 |      | 15   |

# Material Specifications

**Conductor Material** Bare copper

**Drain Wire Material** Tinned copper

**Insulation Material** Polyolefin

Jacket Material PVC

Separator Material Polyolefin

Shield (Tape) Material Polyester/Aluminum shield

Mechanical Specifications

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



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### **Environmental Specifications**

Installation temperature  $0 \, ^{\circ}\text{C} \, \text{to} +60 \, ^{\circ}\text{C} \, (+32 \, ^{\circ}\text{F to} +140 \, ^{\circ}\text{F})$ Operating Temperature  $-20 \, ^{\circ}\text{C} \, \text{to} +60 \, ^{\circ}\text{C} \, (-4 \, ^{\circ}\text{F to} +140 \, ^{\circ}\text{F})$ 

Environmental Space Non-plenum

Flame Test Method CMR | NEC Article 800 | UL 1666 | UL 444

Packaging and Weights

**Cable weight** 50.746 kg/km | 34.1 lb/kft

Packaging Type Reel

### Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

