

CS34Z3 Category 6 U/UTP Cable, low smoke zero halogen, yellow jacket, 4 pair count, 1000 ft (305 m) length CommPak

#### **Product Classification**

Regional Availability EMEA

Portfolio NETCONNECT®

Product Type Twisted pair cable

Ordering Note Available in Europe, Middle East, and Africa

General Specifications

Product Number CS34Z3

ANSI/TIA Category 6

Cable Component Type Horizontal

Cable Type U/UTP (unshielded)

Conductor Type, singles Solid

Conductors, quantity 8

Jacket Color Yellow

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
 1.041 mm | 0.041 in

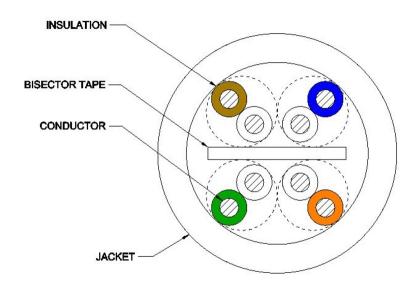
 Diameter Over Jacket, nominal
 5.715 mm | 0.225 in

 Jacket Thickness
 0.559 mm | 0.022 in

Conductor Gauge, singles 24 AWG

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### Cross Section Drawing



## **Electrical Specifications**

**Characteristic Impedance** 100 ohm

dc Resistance Unbalance, maximum 5 %

**dc Resistance, maximum** 9.38 ohms/100 m | 2.859 ohms/100 ft

**Delay Skew, maximum** 24 ns

**Dielectric Strength, minimum** 1500 Vac | 2500 Vdc

Mutual Capacitance at Frequency 5.6 nF/100 m @ 1 kHz

Nominal Velocity of Propagation (NVP) 71 %

**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

Segregation Class

#### 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   |      | TCL  |      | ELTCTL |      |
|--------------|------|------|------|------|------|------|--------|------|-------|------|------|------|--------|------|------|------|------|------|--------|------|
|              | cs   | STD  | cs   | STD  | cs   | STD  | cs     | STD  | cs    | STD  | cs   | STD  | cs     | STD  | cs   | STD  | cs   | STD  | cs     | STD  |
| 1            | 2    | 2    | 75.3 | 74.3 | 73.3 | 72.3 | 72.3   | 72.3 | 70.3  | 70.3 | 68   | 67.8 | 65     | 64.8 | 20   | 20   | 40   | 40   | 35     | 35   |
| 4            | 3.8  | 3.8  | 66.3 | 65.3 | 62.5 | 61.5 | 63.3   | 63.3 | 59.5  | 59.5 | 56   | 55.8 | 53     | 52.8 | 23   | 23   | 40   | 40   | 23     | 23   |
| 8            | 5.3  | 5.3  | 61.8 | 60.8 | 56.4 | 55.4 | 58.8   | 58.8 | 53.4  | 53.4 | 49.9 | 49.7 | 46.9   | 46.7 | 24.5 | 24.5 | 40   | 40   | 16.9   | 16.9 |
| 10           | 6    | 6    | 60.3 | 59.3 | 54.3 | 53.3 | 57.3   | 57.3 | 51.3  | 51.3 | 48   | 47.8 | 45     | 44.8 | 25   | 25   | 40   | 40   | 15     | 15   |
| 16           | 7.6  | 7.6  | 57.2 | 56.2 | 49.7 | 48.7 | 54.2   | 54.2 | 46.7  | 46.7 | 43.9 | 43.7 | 40.9   | 40.7 | 25   | 25   | 38   | 38   | 10.9   | 10.9 |
| 20           | 8.5  | 8.5  | 55.8 | 54.8 | 47.3 | 46.3 | 52.8   | 52.8 | 44.3  | 44.3 | 42   | 41.8 | 39     | 38.8 | 25   | 25   | 37   | 37   | 9      | 9    |
| 25           | 9.5  | 9.5  | 54.3 | 53.3 | 44.8 | 43.8 | 51.3   | 51.3 | 41.8  | 41.8 | 40   | 39.8 | 37     | 36.8 | 24.3 | 24.3 | 36   | 36   | 7      | 7    |
| 31.25        | 10.7 | 10.7 | 52.9 | 51.9 | 42.2 | 41.2 | 49.9   | 49.9 | 39.2  | 39.2 | 38.1 | 37.9 | 35.1   | 34.9 | 23.6 | 23.6 | 35.1 | 35.1 |        |      |
| 62.5         | 15.4 | 15.4 | 48.4 | 47.4 | 33   | 32   | 45.4   | 45.4 | 30    | 30   | 32.1 | 31.9 | 29.1   | 28.9 | 21.5 | 21.5 | 32   | 32   |        |      |
| 100          | 19.8 | 19.8 | 45.3 | 44.3 | 25.5 | 24.5 | 42.3   | 42.3 | 22.5  | 22.5 | 28   | 27.8 | 25     | 24.8 | 20.1 | 20.1 | 30   | 30   |        |      |
| 155          | 25.2 | 25.2 | 42.4 | 41.4 | 17.3 | 16.3 | 39.4   | 39.4 | 14.3  | 14.3 | 24.2 | 24   | 21.2   | 21   | 18.8 | 18.8 | 28.1 | 28.1 |        |      |
| 200          | 29   | 29   | 40.8 | 39.8 | 11.8 | 10.8 | 37.8   | 37.8 | 8.8   | 8.8  | 22   | 21.8 | 19     | 18.8 | 18   | 18   | 27   | 27   |        |      |
| 250          | 32.8 | 32.8 | 39.3 | 38.3 | 6.5  | 5.5  | 36.3   | 36.3 | 3.5   | 3.5  | 20   | 19.8 | 17     | 16.8 | 17.3 | 17.3 | 26   | 26   |        |      |

### Material Specifications

Conductor Material Bare copper

**Insulation Material** Polyolefin

Jacket Material Low Smoke Zero Halogen (LSZH)

**Separator Material** Polyolefin

Mechanical Specifications

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

### **Environmental Specifications**

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

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

Acid Gas Test Method IEC 60754-2

EN50575 CPR Cable EuroClass Fire Performance Dca

**COMMSCOPE®** 

Environmental Space Low Smoke Zero Halogen (LSZH)

Flame Test Method IEC 60332-3-22

Smoke Test Method IEC 61034-2

Packaging and Weights

**Cable weight** 28.424 kg/km | 19.1 lb/kft

Packaging Type CommPak® box

### Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Below maximum concentration value

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

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant

