

CS44P ETL Verified Category 6A U/UTP Cable, plenum, blue jacket, 4 pair count, 1000 ft (305 m) length reel

#### **Product Classification**

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America

Portfolio NETCONNECT®

Product Type Twisted pair cable

General Specifications

Product Number CS44P
ANSI/TIA Category 6A

Cable Component Type Horizontal

 Cable Type
 U/UTP (unshielded)

Conductor Type, singlesSolidConductors, quantity8Jacket ColorBlue

**Note** Consult ANSI/TIA-568-C.2 Annex G for length de-rating guidance for cable

installation in higher temperature environments

Pairs, quantity 4

Separator Type Bisector

Supported Application1000BASE-T| 1000BASE-TX| 10GBASE-TTransmission StandardsANSI/TIA-568.2-D| ISO/IEC 11801 Class EA

**Dimensions** 

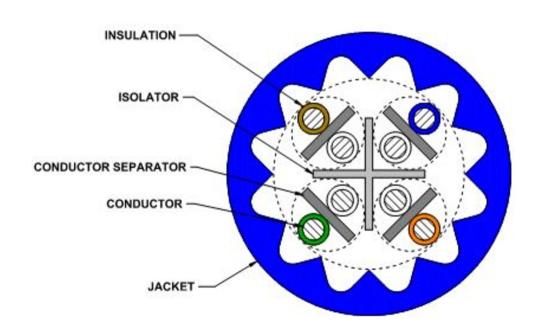
**Cable Length** 304.8 m | 1000 ft

Diameter Over Insulated Conductor0.889 mm0.035 inDiameter Over Jacket, nominal7.239 mm0.285 inJacket Thickness1.295 mm0.051 in

Conductor Gauge, singles 23 AWG

Cross Section Drawing





### **Electrical Specifications**

dc Resistance Unbalance, maximum 4 %

dc Resistance, maximum 7.61 ohms/100 m | 2.32 ohms/100 ft

**Delay Skew, maximum** 45 ns

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

LP (Limited Power) Rating 0.6 A

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

Nominal Velocity of Propagation (NVP) 66 %

Operating Frequency, maximum500 MHzOperating Voltage, maximum80 V

**Propagation Delay, maximum** 536 ns/100m @500MHz

**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

#### 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  | 1.8  | 74.3 | 90.6 | 72.2  | 88.8 | 72.3   | 88.3 | 70.2  | 86.5 | 67.8 | 82.1 | 64.8   | 80.3 | 20   | 32.2 |
| 4            | 3.8  | 3.6  | 65.3 | 82.4 | 61.5  | 78.8 | 63.3   | 80.2 | 59.5  | 76.6 | 55.8 | 70.1 | 52.8   | 68.4 | 23   | 33.9 |
| 8            | 5.3  | 5.1  | 60.8 | 77.6 | 55.4  | 72.5 | 58.8   | 75.8 | 53.4  | 70.7 | 49.7 | 64.1 | 46.7   | 62.3 | 24.5 | 36.7 |
| 10           | 5.9  | 5.7  | 59.3 | 76.4 | 53.4  | 70.7 | 57.3   | 74.4 | 51.4  | 68.7 | 47.8 | 62.2 | 44.8   | 60.4 | 25   | 37.7 |
| 16           | 7.5  | 7.3  | 56.2 | 73.1 | 48.8  | 65.9 | 54.2   | 71.3 | 46.8  | 64   | 43.7 | 58.2 | 40.7   | 56.4 | 25   | 38.7 |
| 20           | 8.4  | 8.1  | 54.8 | 71.5 | 46.4  | 63.4 | 52.8   | 69.7 | 44.4  | 61.6 | 41.8 | 56.4 | 38.8   | 54.5 | 25   | 38.7 |
| 25           | 9.4  | 9.1  | 53.3 | 70.2 | 44    | 61.1 | 51.3   | 68.3 | 42    | 59.2 | 39.8 | 54.5 | 36.8   | 52.6 | 24.3 | 35.5 |
| 31.25        | 10.5 | 10.2 | 51.9 | 68.6 | 41.4  | 58.4 | 49.9   | 66.7 | 39.4  | 56.5 | 37.9 | 52.7 | 34.9   | 50.7 | 23.6 | 37.2 |
| 62.5         | 15   | 14.6 | 47.4 | 64.2 | 32.4  | 49.6 | 45.4   | 62.3 | 30.4  | 47.7 | 31.9 | 46.6 | 28.9   | 44.7 | 21.5 | 34.6 |
| 100          | 19.1 | 18.6 | 44.3 | 60.8 | 25.2  | 42.1 | 42.3   | 59   | 23.2  | 40.3 | 27.8 | 42.5 | 24.8   | 40.5 | 20.1 | 30.3 |
| 155          | 24.1 | 23.4 | 41.4 | 58.4 | 17.4  | 35   | 39.4   | 56.4 | 15.4  | 33   | 24   | 38.9 | 21     | 37   | 18.8 | 30.8 |
| 200          | 27.6 | 26.8 | 39.8 | 56   | 12.2  | 29.2 | 37.8   | 54.2 | 10.2  | 27.4 | 21.8 | 36.6 | 18.8   | 34.6 | 18   | 30   |
| 250          | 31.1 | 30.1 | 38.3 | 54.3 | 7.3   | 24.2 | 36.3   | 52.5 | 5.3   | 22.3 | 19.8 | 34.6 | 16.8   | 32.6 | 17.3 | 30.5 |
| 300          | 34.3 | 33.1 | 37.1 | 53.1 | 2.9   | 19.9 | 35.1   | 51.2 | 0.9   | 18.1 | 18.3 | 33.1 | 15.3   | 31.2 | 16.8 | 31.1 |
| 350          | 37.2 | 36   | 36.1 | 51.8 | -1.1  | 15.8 | 34.1   | 49.9 | -3.1  | 13.9 | 16.9 | 31.9 | 13.9   | 29.9 | 16.3 | 31.7 |
| 400          | 40.1 | 38.8 | 35.3 | 50.8 | -4.8  | 12   | 33.3   | 48.8 | -6.8  | 10   | 15.8 | 30.6 | 12.8   | 28.6 | 15.9 | 31.5 |
| 500          | 45.3 | 43.6 | 33.8 | 47.9 | -11.4 | 4.3  | 31.8   | 45.8 | -13.4 | 2.2  | 13.8 | 28.7 | 10.8   | 26.7 | 15.2 | 32   |
| 550          |      | 43.8 |      | 48   |       | 4.1  |        | 45.9 |       | 2    |      | 28.6 |        | 26.7 |      | 31.9 |
| 650          |      | 50.2 |      | 43.5 |       | -6.7 |        | 41.5 |       | -8.8 |      | 25.7 |        | 23.5 |      | 25.3 |

### Material Specifications

Conductor Material Bare copper

Insulation Material FEP

Jacket Material PVC

Separator Material Polyolefin

Mechanical Specifications

Minimum Bend Radius Note 4 times the outer cable diameter

Pulling Tension, maximum 11.34 kg | 25 lb



### **Environmental Specifications**

Installation temperature  $0 \, ^{\circ}\text{C} \, \text{to} + 60 \, ^{\circ}\text{C} \, (+32 \, ^{\circ}\text{F} \, \text{to} + 140 \, ^{\circ}\text{F})$ Operating Temperature  $-20 \, ^{\circ}\text{C} \, \text{to} + 75 \, ^{\circ}\text{C} \, (-4 \, ^{\circ}\text{F} \, \text{to} + 167 \, ^{\circ}\text{F})$ Storage Temperature  $-20 \, ^{\circ}\text{C} \, \text{to} + 75 \, ^{\circ}\text{C} \, (-4 \, ^{\circ}\text{F} \, \text{to} + 167 \, ^{\circ}\text{F})$ 

Environmental Space Plenum

**Temperature Rating, ETL** 105 °C | 221 °F

Smoke Test Method CMP/FT6

Packaging and Weights

**Cable weight** 63.098 kg/km | 42.4 lb/kft

Packaging Type Reel

### 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  |

