# 874046884/30 | CS24P GRY C5E 4/24 F/UTP RL 3KFT

Category 5e F/UTP Cable, plenum, gray jacket, 4 pair count, 3000 ft (914 m) length, reel

#### Product Classification

| Regional Availability         | Asia   Australia/New Zealand   EMEA   Latin America   North America    |
|-------------------------------|--|
| Portfolio                     | CommScope®   |
| Product Type                  | Twisted pair cable   |
| General Specifications        |  |
| Product Number                | CS24P  |
| ANSI/TIA Category             | 5e   |
| Cable Component Type          | Horizontal   |
| Cable Type                    | F/UTP (shielded)   |
| Conductor Type, singles       | Solid  |
| Conductors, quantity          | 8  |
| Drain Wire Type               | Solid  |
| Jacket Color                  | Gray   |
| Note                          | All electrical transmission tests include swept frequency measurements |
| Pairs, quantity               | 4  |
| 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 | 5.969 mm   0.235 in  |
| Jacket Thickness              | 0.457 mm   0.018 in  |
| Conductor Gauge, singles      | 24 AWG   |
| Drain Wire Gauge              | 26 AWG   |
|                               |  |

## Cross Section Drawing

Page 1 of 4



# 874046884/30 | CS24P GRY C5E 4/24 F/UTP RL 3KFT

| Jacket       |  |
|--------------|--|
| Insulation – |  |
| Tape ——      |  |
| Conductor -  |  |
| Shield ——    |  |
| Drain Wire   |  |

#### 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                   | 15 ns   |
| Dielectric Strength, minimum          | 1500 Vac   2500 Vdc   |
| Mutual Capacitance at Frequency       | 5.6 nF/100 m @ 1 kHz  |
| Nominal Velocity of Propagation (NVP) | 73 %  |
| Operating Frequency, maximum          | 100 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   |

Page 2 of 4



### Electrical Cable Performance

| CS     | CommScope   |        |   |  |  |
|--------|---|--------|---|--|--|
| STD    | Refers to the standard value listed under Transmission Standards in the Electrical Specifications above |        |   |  |  |
| ТҮР    | 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 | I    | IL   |      | NEXT |      | ACR  |      | PSNEXT |      | PSACR |      | ACRF |      | PSACRF |      | RL   |  |
|--------------|------|------|------|------|------|------|------|--------|------|-------|------|------|------|--------|------|------|--|
|              | STD  | түр  | STD  | түр  | STD  | түр  | STD  | түр    | STD  | түр   | STD  | түр  | STD  | түр    | STD  | ТҮР  |  |
| 1            | 2    | 1.9  | 65.3 | 83.1 | 63.3 | 81.2 | 62.3 | 80.8   | 60.3 | 78.9  | 63.8 | 84.4 | 60.8 | 82.4   | 20   | 33   |  |
| 4            | 4.1  | 3.7  | 56.3 | 73.4 | 52.2 | 69.8 | 53.3 | 71.3   | 49.2 | 67.6  | 51.8 | 73.3 | 48.8 | 71.4   | 23   | 30.6 |  |
| 8            | 5.8  | 5.2  | 51.8 | 69   | 46   | 63.9 | 48.8 | 67     | 43   | 61.8  | 45.7 | 67.4 | 42.7 | 65.5   | 24.5 | 31.5 |  |
| 10           | 6.5  | 5.8  | 50.3 | 67.2 | 43.8 | 61.4 | 47.3 | 65.1   | 40.8 | 59.3  | 43.8 | 65.4 | 40.8 | 63.5   | 25   | 32.4 |  |
| 16           | 8.2  | 7.4  | 47.2 | 64.1 | 39   | 56.8 | 44.2 | 62     | 36   | 54.7  | 39.7 | 61.3 | 36.7 | 59.4   | 25   | 31.8 |  |
| 20           | 9.3  | 8.2  | 45.8 | 62.6 | 36.5 | 54.4 | 42.8 | 60.5   | 33.5 | 52.2  | 37.8 | 59.4 | 34.8 | 57.4   | 25   | 33   |  |
| 25           | 10.4 | 9.2  | 44.3 | 60.9 | 33.9 | 51.6 | 41.3 | 58.8   | 30.9 | 49.6  | 35.8 | 57.6 | 32.8 | 55.5   | 24.3 | 33.1 |  |
| 31.25        | 11.7 | 10.3 | 42.9 | 59.6 | 31.2 | 49.2 | 39.9 | 57.4   | 28.2 | 47.1  | 33.9 | 55.6 | 30.9 | 53.5   | 23.6 | 33.4 |  |
| 62.5         | 17   | 14.7 | 38.4 | 54.4 | 21.4 | 39.8 | 35.4 | 52.4   | 18.4 | 37.7  | 27.9 | 49.5 | 24.9 | 47.4   | 21.5 | 32.9 |  |
| 100          | 22   | 18.6 | 35.3 | 51   | 13.3 | 32.4 | 32.3 | 48.9   | 10.3 | 30.2  | 23.8 | 45.5 | 20.8 | 43.3   | 20.1 | 29.9 |  |
| 155          |      | 23.4 |      | 46.9 |      | 23.5 |      | 45.1   |      | 21.7  |      | 41.3 |      | 39.3   |      | 28   |  |
| 200          |      | 26.7 |      | 45.1 |      | 18.4 |      | 43.2   |      | 16.5  |      | 39.1 |      | 37     |      | 26   |  |
| 250          |      | 29.9 |      | 44.8 |      | 14.9 |      | 42.7   |      | 12.8  |      | 37.1 |      | 35.1   |      | 25.1 |  |
| 300          |      | 32.9 |      | 43   |      | 10.1 |      | 40.9   |      | 8     |      | 35.6 |      | 33.4   |      | 25   |  |
| 350          |      | 35.7 |      | 41.6 |      | 5.9  |      | 39.7   |      | 3.9   |      | 34.1 |      | 31.8   |      | 25.6 |  |

#### Material Specifications

| Conductor Material           | Bare copper        |
|------------------------------|--------------------|
| Drain Wire Material          | Tinned copper      |
| Insulation Material          | FEP                |
| Jacket Material              | PVC                |
| Shield (Tape) Material       | Aluminum/Polyester |
| Mechanical Specifications    |                    |
| Pulling Tension, maximum     | 11.34 kg   25 lb   |
|                              |                    |
| Covicoppontal Specifications |                    |

#### **Environmental Specifications**

| Installation temperature | 0 °C to +60 °C (+32 °F to +140 °F)  |
|--------------------------|-------------------------------------|
| Operating Temperature    | -20 °C to +60 °C (-4 °F to +140 °F) |



## 874046884/30 | CS24P GRY C5E 4/24 F/UTP RL 3KFT

| 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                |  |  |  |  |  |  |
| Cable weight                         |  | 44.05 kg/km   29.6 lb/kft                              |  |  |  |  |
| Packaging Type                       |  | Reel   |  |  |  |  |
| Regulatory Compliance/Certifications |  |  |  |  |  |  |
| Agency                               | Classification   |  |  |  |  |  |
| ISO 9001:2015                        | Designed, manufactured and/or distributed under this quality management system |  |  |  |  |  |

Page 4 of 4

