## 760249707 | 0-006-CA-5X-M06BK/28G/093



Fiber OSP cable, PE, Gel-filled Central Tube, CST, 6 fiber, Multimode OM4, Meters jacket marking, Black jacket color

#### **Product Classification**

Regional Availability

Asia | Australia/New Zealand

Portfolio CommScope®
Product Type Fiber OSP cable

Product Series O-CA

## General Specifications

**Cable Type** Central loose tube

Construction Type Armored
Subunit Type Gel-filled
Jacket Color Black
Jacket Marking Feet
Fibers per Subunit, quantity 6
Total Fiber Count 6

#### Dimensions

Buffer Tube/Subunit Diameter 2.8 mm | 0.11 in

Diameter Over Jacket 9.1 mm | 0.358 in

### Mechanical Specifications

Minimum Bend Radius, loaded182 mm | 7.165 inMinimum Bend Radius, unloaded91 mm | 3.583 inTensile Load, long term, maximum890 N | 200.08 lbfTensile Load, short term, maximum2700 N | 606.984 lbfCompression20 N/mm | 114.203 lb/in

**Compression Test Method** IEC 60794-1-2 E3

COMMSC PE°

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Flex 25 cycles

**Strain** See long and short term tensile loads

Strain Test Method IEC 60794-1-2-E1

Optical Specifications

**Fiber Type** OM4

Optical Specifications, Wavelength Specific

**Attenuation, maximum** 1.00 dB/km @ 1,300 nm | 3.00 dB/km @ 850 nm

**Environmental Specifications** 

**Installation temperature** -10 °C to +60 °C (+14 °F to +140 °F)

**Operating Temperature**  $-40 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$ 

**Storage Temperature**  $-40 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$ 

Environmental Space Buried | Ducted | Outdoor

Water Penentration 24 h

**Water Penentration Test Method** IEC 60794-1 F5B

**Environmental Test Specifications** 

**Temperature Cycle**  $-40 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$ 

**Temperature Cycle Test Method** IEC 60794-1-2 F1

Packaging and Weights

Cable weight 92 kg/km | 61.821 lb/kft

Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Below maximum concentration value

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

ROHS Compliant UK-ROHS Compliant



#### Included Products

COMMSC PE°

## 760249707 | 0-006-CA-5X-M06BK/28G/093

CS-5X-LT-3.0/1.0/093 - OM4 Bend-Insensitive Multimode Fiber

### \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

## CS-5X-LT-3.0/1.0/093

#### OM4 Bend-Insensitive Multimode Fiber

#### **Product Classification**

PortfolioCommScope®Product TypeOptical fiber

### General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance** ±1.0 µm 1 % **Cladding Non-Circularity, maximum Coating Diameter (Colored)** 255 um **Coating Diameter (Uncolored)** 245 µm **Coating Diameter Tolerance (Colored)** ±10 µm **Coating Diameter Tolerance (Uncolored)** ±10 μm Coating/Cladding Concentricity Error, maximum 12 µm **Core Diameter** 50 µm **Core Diameter Tolerance** ±2.5 µm Core/Clad Offset, maximum  $1.5 \, \mu m$ 

**Proof Test** 689.476 N/mm<sup>2</sup> | 100000 psi

## Mechanical Specifications

 Macrobending, 15 mm Ø mandrel, 2 turns
 0.20 dB @ 850 nm | 0.50 dB @ 1,300 nm

 Macrobending, 30 mm Ø mandrel, 2 turns
 0.10 dB @ 850 nm | 0.30 dB @ 1,300 nm

 Macrobending, 75 mm Ø mandrel, 100 turns
 0.50 dB @ 1,300 nm | 0.50 dB @ 850 nm

Coating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 18

### **Optical Specifications**

 Numerical Aperture
 0.2

 Numerical Aperture Tolerance
 ±0.015

 Point Defects, maximum
 0.15 dB



# CS-5X-LT-3.0/1.0/093

## Optical Specifications, Wavelength Specific

**1 Gbps Ethernet Distance** 1,110 m @ 850 nm | 600 m @ 1,300 nm

**10 Gbps Ethernet Distance** 550 m @ 850 nm

**Attenuation, maximum** 1.00 dB/km @ 1,300 nm | 3.00 dB/km @ 850 nm

**Backscatter Coefficient** -68.0 dB @ 850 nm | -75.7 dB @ 1,300 nm

 Bandwidth, Laser, minimum
 4,700 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm

 Bandwidth, OFL, minimum
 3,500 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm

**Differential Mode Delay** 0.70 ps/m @ 850 nm | 0.88 ps/m @ 1,300 nm

Differential Mode Delay Note Superior to TIA-492AAAC and IEC 60793-2-10 at 850 nm

**Index of Refraction** 1.479 @ 1,300 nm | 1.483 @ 850 nm

**Standards Compliance** IEC 60793-2-10, type A1a.3a | IEC 60793-2-10, type A1a.3b | TIA-

492AAAD (OM4)

#### **Environmental Specifications**

**Heat Aging, maximum** 0.20 dB/km @ 85 °C

Temperature Dependence, maximum0.1 dB/kmTemperature Humidity Cycling, maximum0.2 dB/km

**Water Immersion, maximum** 0.20 dB/km @ 23 °C

#### \* Footnotes

**Temperature Dependence, maximum** Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)

**Temperature Humidity Cycling, maximum** Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F)

up to 95% relative humidity

