



Fiber OSP cable, PE, Gel-filled Central Tube, CST, 12 fiber, Multimode OM5, Meters jacket marking, Black jacket color

## Product Classification

<b>Regional Availability</b>	Asia   Australia/New Zealand
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber OSP cable
<b>Product Series</b>	O-CA

## General Specifications

<b>Cable Type</b>	Central loose tube
<b>Construction Type</b>	Armored
<b>Subunit Type</b>	Gel-filled
<b>Jacket Color</b>	Black
<b>Jacket Marking</b>	Feet
<b>Fibers per Subunit, quantity</b>	12
<b>Total Fiber Count</b>	12

## Dimensions

<b>Buffer Tube/Subunit Diameter</b>	2.8 mm   0.11 in
<b>Diameter Over Jacket</b>	9.1 mm   0.358 in

## Mechanical Specifications

<b>Minimum Bend Radius, loaded</b>	182 mm   7.165 in
<b>Minimum Bend Radius, unloaded</b>	91 mm   3.583 in
<b>Tensile Load, long term, maximum</b>	890 N   200.08 lbf
<b>Tensile Load, short term, maximum</b>	2700 N   606.984 lbf
<b>Compression</b>	20 N/mm   114.203 lb/in
<b>Compression Test Method</b>	IEC 60794-1-2 E3
<b>Flex</b>	25 cycles
<b>Strain</b>	See long and short term tensile loads

**Strain Test Method** IEC 60794-1-2-E1

## Optical Specifications

**Fiber Type** OM5

## 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 °C to +70 °C (-40 °F to +158 °F)

**Storage Temperature** -40 °C to +70 °C (-40 °F to +158 °F)

**Environmental Space** Buried | Ducted | Outdoor

**Water Penetration** 24 h

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

## Environmental Test Specifications

**Temperature Cycle** -40 °C to +70 °C (-40 °F to +158 °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 <a href="https://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant



## Included Products

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

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## OM4 Bend-Insensitive Multimode Fiber

### Product Classification

<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Optical fiber

### General Specifications

<b>Cladding Diameter</b>	125 µm
<b>Cladding Diameter Tolerance</b>	±1.0 µm
<b>Cladding Non-Circularity, maximum</b>	1 %
<b>Coating Diameter (Colored)</b>	255 µm
<b>Coating Diameter (Uncolored)</b>	245 µm
<b>Coating Diameter Tolerance (Colored)</b>	±10 µm
<b>Coating Diameter Tolerance (Uncolored)</b>	±10 µm
<b>Coating/Cladding Concentricity Error, maximum</b>	12 µm
<b>Core Diameter</b>	50 µm
<b>Core Diameter Tolerance</b>	±2.5 µm
<b>Core/Clad Offset, maximum</b>	1.5 µm
<b>Proof Test</b>	689.476 N/mm <sup>2</sup>   100000 psi

### Mechanical Specifications

<b>Macrobending, 15 mm Ø mandrel, 2 turns</b>	0.20 dB @ 850 nm   0.50 dB @ 1,300 nm
<b>Macrobending, 30 mm Ø mandrel, 2 turns</b>	0.10 dB @ 850 nm   0.30 dB @ 1,300 nm
<b>Macrobending, 75 mm Ø mandrel, 100 turns</b>	0.50 dB @ 1,300 nm   0.50 dB @ 850 nm
<b>Coating Strip Force, maximum</b>	8.9 N   2.001 lbf
<b>Coating Strip Force, minimum</b>	1.3 N   0.292 lbf
<b>Dynamic Fatigue Parameter, minimum</b>	18

### Optical Specifications

<b>Numerical Aperture</b>	0.2
<b>Numerical Aperture Tolerance</b>	±0.015
<b>Point Defects, maximum</b>	0.15 dB

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

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## Optical Specifications, Wavelength Specific

<b>1 Gbps Ethernet Distance</b>	1,110 m @ 850 nm   600 m @ 1,300 nm
<b>10 Gbps Ethernet Distance</b>	550 m @ 850 nm
<b>Attenuation, maximum</b>	1.00 dB/km @ 1,300 nm   3.00 dB/km @ 850 nm
<b>Backscatter Coefficient</b>	-68.0 dB @ 850 nm   -75.7 dB @ 1,300 nm
<b>Bandwidth, Laser, minimum</b>	4,700 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm
<b>Bandwidth, OFL, minimum</b>	3,500 MHz-km @ 850 nm   500 MHz-km @ 1,300 nm
<b>Differential Mode Delay</b>	0.70 ps/m @ 850 nm   0.88 ps/m @ 1,300 nm
<b>Differential Mode Delay Note</b>	Superior to TIA-492AAAC and IEC 60793-2-10 at 850 nm
<b>Index of Refraction</b>	1.479 @ 1,300 nm   1.483 @ 850 nm
<b>Standards Compliance</b>	IEC 60793-2-10, type A1a.3a   IEC 60793-2-10, type A1a.3b   TIA-492AAAD (OM4)

## Environmental Specifications

<b>Heat Aging, maximum</b>	0.20 dB/km @ 85 °C
<b>Temperature Dependence, maximum</b>	0.1 dB/km
<b>Temperature Humidity Cycling, maximum</b>	0.2 dB/km
<b>Water Immersion, maximum</b>	0.20 dB/km @ 23 °C

### \* Footnotes

<b>Temperature Dependence, maximum</b>	Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)
<b>Temperature Humidity Cycling, maximum</b>	Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity