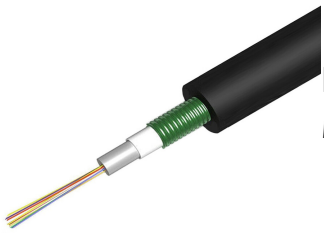
760257826 | O-002-CA-5C-M02BK/28G/093



Fiber OSP cable, PE, Gel-filled Central Tube, CST, 2 fiber, Multimode OM5, 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	Meters
Fibers per Subunit, quantity	4
Total Fiber Count	2

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, loaded	182 mm | 7.165 in
Minimum Bend Radius, unloaded	91 mm | 3.583 in
Tensile Load, long term, maximum	890 N | 200.08 lbf
Tensile Load, short term, maximum	2700 N | 606.984 lbf
Compression	20 N/mm | 114.203 lb/in
Compression Test Method	IEC 60794-1-2 E3
Flex	25 cycles
Strain	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 www.commscope.com/ProductCompliance
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

OM4 Bend-Insensitive Multimode Fiber

Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±5 µm
Cladding Non-Circularity, maximum	1 %
Coating Diameter (Colored)	255 µm
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 µm
Proof Tensile Stress	100,000 psi (0.69 GPa)

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, maximum	8.9 N | 2.001 lbf
Coating Strip Force, minimum	1.3 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, maximum	0.1 dB/km
Temperature Humidity Cycling, maximum	0.2 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