2-599687-3 | C-012-CA-5L-M12BK/28G/GY



Fiber Optic Cable, Armored LSZH, OM3, loose tube, gel-filled

Product Classification

Regional Availability Australia/New Zealand | EMEA

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series C-CA

General Specifications

Armor Type Corrugated steel

Cable TypeLoose tubeSubunit TypeGel-filledJacket ColorBlackJacket MarkingMeters

Jacket Marking Method Inkjet

Jacket Marking Text COMMSCOPE GB SYSTEM F.O. CABLE X-599687-3 CSA GEL LOOSE TUBE 12X50/125

OM3 ULSZH (Serial NUMBER) (METRE MARK)

Fibers per Subunit, quantity 12

Total Fiber Count 12

Dimensions

Diameter Over Jacket 10 mm | 0.394 in

Material Specifications

Jacket Material Low Smoke Zero Halogen (LSZH)

Mechanical Specifications

Minimum Bend Radius, loaded 200.7 mm | 7.902 in

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Minimum Bend Radius, unloaded160 mm6.299 inTensile Load, long term, maximum625 N140.506 lbf

Tensile Load, short term, maximum 1200 N | 269.771 lbf

Optical Specifications

Fiber Type OM3, LazrSPEED®

Optical Specifications, Wavelength Specific

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

Standards Compliance TIA-492AAAC (OM3)

Environmental Specifications

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

Packaging and Weights

Cable weight 102 kg/km | 68.541 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-5L-LT – LazrSPEED® 300 OM3 Bend-Insensitive Multimode

Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



LazrSPFFD® 300 OM3 Bend-Insensitive Multimode Fiber

LazrSPEED® 300

Product Classification

Portfolio CommScope®
Product Type Optical fiber

General Specifications

Cladding Diameter 125 µm **Cladding Diameter Tolerance** ±0.8 µm Cladding Non-Circularity, maximum 1 % **Coating Diameter (Colored)** 254 µm **Coating Diameter (Uncolored)** 245 µm **Coating Diameter Tolerance (Colored)** ±7 µm **Coating Diameter Tolerance (Uncolored)** ±10 μm Coating/Cladding Concentricity Error, maximum 12 µm **Core Diameter** 50 µm **Core Diameter Tolerance** ±2.5 µm

Proof Test 689.476 N/mm² | 100000 psi

Mechanical Specifications

Core/Clad Offset, maximum

 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

 $1.5 \, \mu m$

Coating Strip Force, maximum $8.9 \, \text{N}$ $2.001 \, \text{lbf}$ Coating Strip Force, minimum $1.3 \, \text{N}$ $0.292 \, \text{lbf}$

Dynamic Fatigue Parameter, minimum 18

COMMSCOPE®

CS-5L-LT

Optical Specifications

Numerical Aperture 0.2

Numerical Aperture Tolerance±0.015Point Defects, maximum0.15 dB

Zero Dispersion Slope, maximum 0.105 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum 1316 nm **Zero Dispersion Wavelength, minimum** 1297 nm

Optical Specifications, Wavelength Specific

1 Gbps Ethernet Distance 1,020 m @ 850 nm | 600 m @ 1,300 nm

10 Gbps Ethernet Distance 300 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
 2,000 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm

 Bandwidth, OFL, minimum
 1,500 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 NoteSuperior 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 TIA-492AAAC (OM3)

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

Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system



* Footnotes



CS-5L-LT

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

