



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 Type	Loose tube
Subunit Type	Gel-filled
Jacket Color	Black
Jacket Marking	Meters
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
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Material Specifications

Jacket Material	Low Smoke Zero Halogen (LSZH)
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Mechanical Specifications

Minimum Bend Radius, loaded	200.7 mm   7.902 in
Minimum Bend Radius, unloaded	160 mm   6.299 in
Tensile Load, long term, maximum	625 N   140.506 lbf

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

**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 °C to +70 °C (-40 °F to +158 °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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
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

## LazrSPEED® 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	±5 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
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
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# CS-5L-LT

Numerical Aperture Tolerance	±0.015
Point Defects, maximum	0.15 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
Differential Mode Delay Note	Superior to ANSI/TIA TIA-492AAAF and IEC 60793-2-10 at 850 nm
Index of Refraction	1.479 @ 1,300 nm   1.483 @ 850 nm
Standards Compliance	ANSI/TIA-492AAAF (OM3)

## 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

## Regulatory Compliance/Certifications

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

## \* 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