## 2-599683-3 | 0-012-CA-5L-M12BK/28G/GY/HD



Outside Plant Fiber Optic Cable, HDPE, 12-fiber, Multimode, OM3, loose tube, gel-filled. Provides Rodent Resistance.

#### **Product Classification**

Regional Availability Australia/New Zealand | EMEA

 Portfolio
 CommScope®

 Product Type
 Fiber OSP cable

Product Series O-CA

General Specifications

**Armor Type** Corrugated steel

Cable TypeLoose tubeSubunit TypeGel-filled

Filler, quantity

Jacket ColorBlackJacket MarkingMetersJacket Marking MethodInkjet

Jacket Marking Text COMMSCOPE GB SYSTEM F.O. CABLE X-599683-3 CSA GEL LOOSE TUBE 12X50/125

OM3 HDPE (Serial NUMBER) (METRE MARK)

Fibers per Subunit, quantity 12

Total Fiber Count 12

**Dimensions** 

 Cable Length
 2000 m | 6,561.68 ft

 Diameter Over Jacket
 10 mm | 0.394 in

Material Specifications

Jacket Material High density polyethylene (HDPE)

**COMMSCOPE®** 

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### Mechanical Specifications

Minimum Bend Radius, loaded200.7 mm7.902 inMinimum Bend Radius, unloaded160 mm6.299 inTensile Load, long term, maximum625 N140.506 lbfTensile Load, short term, maximum1200 N269.771 lbf

Flex 25 cycles

Optical Specifications

**Fiber Type** OM3

Optical Specifications, Wavelength Specific

**Attenuation, maximum** 1.00 dB/km @ 1,300 nm | 3.50 dB/km @ 850 nm

Standards Compliance IEC 60794-1 | TIA-492AAAC (OM3)

## **Environmental Specifications**

Installation temperature  $-5 \,^{\circ}\text{C}$  to  $+50 \,^{\circ}\text{C}$  (+23  $^{\circ}\text{F}$  to +122  $^{\circ}\text{F}$ )

Operating Temperature  $-20 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-4  $^{\circ}\text{F}$  to +158  $^{\circ}\text{F}$ )

Storage Temperature  $-20 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-4  $^{\circ}\text{F}$  to +158  $^{\circ}\text{F}$ )

Packaging and Weights

**Cable weight** 104 kg/km | 69.885 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-TB – LazrSPEED® 300 OM3 Bend-Insensitive Multimode

Fiber

**COMMSCOPE®** 

# 2-599683-3 | 0-012-CA-5L-M12BK/28G/GY/HD

\* 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** ±0.8 µm Cladding Non-Circularity, maximum 1 % **Coating Diameter (Colored)**  $254 \, \mu m$ **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

Tight Buffer Diameter 900  $\mu m$ Tight Buffer Diameter Tolerance  $\pm 40 \ \mu m$ 

## 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

 $1.5 \, \mu m$ 

Coating Strip Force, maximum 8.9 N | 2.001 lbf



## CS-5L-TB

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

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

Zero Dispersion Wavelength, maximum1316 nmZero Dispersion Wavelength, minimum1297 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 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 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



**COMMSCOPE®** 

# CS-5L-TB

## \* 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

