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



Product Classification

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

| 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<br>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  |
| Minimum Bend Radius, unloaded    | 160 mm   6.299 in  |
| Tensile Load, long term, maximum | 625 N   140.506 lbf  |

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

| Tensile Load, short term,                   | maximum          | 1200 N   269.771 lbf                                 |
|---|------------------|--|
| Optical Specifica                           | tions            |  |
| 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 www.commscope.com/ProductCompliance |
| ROHS  | Compliant        |  |
|   |                  |  |



#### Included Products

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CS-5L-LT

LazrSPEED® 300 OM3 Bend-Insensitive Multimode Fiber

## \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

Compliant

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#### 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 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 Test                                    | 689.476 N/mm²   100000 psi |
|   |                            |

# 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                                    |

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# CS-5L-LT

# **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, 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 |
|--------|----------------|
| 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) |

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up to 95% relative humidity

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