



Indoor/Outdoor Low Smoke Zero Halogen, LazrSPEED® Central Loose Tube Fiber Optic Cable, 24-fiber, Multimode OM3, Gel-filled, black

- non-metallic construction reinforced by E-glass yarns, which provide rodent resistance and higher tensile strength

Product Classification

| | |
|------------------------------|-------------------------------------|
| Regional Availability | Asia Australia/New Zealand EMEA |
| Portfolio | CommScope® |
| Product Type | Fiber indoor/outdoor cable |
| Product Series | C-CN |

General Specifications

| | |
|-------------------------------------|--|
| Cable Type | Loose tube |
| Construction Type | Non-armored |
| Subunit Type | Gel-filled |
| Jacket Color | Black |
| Jacket Marking | Meters |
| Jacket Marking Method | Inkjet |
| Jacket Marking Text | COMMSCOPE GB OPTICAL CABLE 760254778 INT/EXT GEL LOOSE TUBE 24X50/125 OM4 [Serial NUMBER] [METRE MARK] |
| Fibers per Subunit, quantity | 24 |
| Total Fiber Count | 24 |

Dimensions

| | |
|-------------------------------------|----------------------|
| Cable Length | 2000 m 6,561.68 ft |
| Buffer Tube/Subunit Diameter | 4 mm 0.157 in |
| Diameter Over Jacket | 8 mm 0.315 in |

Mechanical Specifications

| | |
|---|--------------------|
| Minimum Bend Radius, loaded | 150 mm 5.906 in |
| Minimum Bend Radius, unloaded | 140 mm 5.512 in |
| Tensile Load, long term, maximum | 300 N 67.443 lbf |

760254778 | C-024-CN-5K-M24BK/40G/AY/E

| | |
|--|-------------------------|
| Tensile Load, short term, maximum | 600 N 134.885 lbf |
| Compression | 20 N/mm 114.203 lb/in |
| Compression Test Method | IEC 60794-1-2 E3 |
| Impact | 20 N-m 177.015 in lb |
| Impact Test Method | IEC 60794-1 E4 |

Optical Specifications

| | |
|-------------------|-----------------|
| Fiber Type | OM4, LazrSPEED® |
|-------------------|-----------------|

Optical Specifications, Wavelength Specific

| | |
|-----------------------------|---------------------------------|
| Standards Compliance | IEC 60794-1 TIA-492CAAB (OS2) |
|-----------------------------|---------------------------------|

Environmental Specifications

| | |
|---|-------------------------------------|
| Installation temperature | -5 °C to +50 °C (+23 °F to +122 °F) |
| Operating Temperature | -20 °C to +60 °C (-4 °F to +140 °F) |
| Storage Temperature | -20 °C to +60 °C (-4 °F to +140 °F) |
| EN50575 CPR Cable EuroClass Fire Performance | Eca |
| Environmental Space | Low Smoke Zero Halogen (LSZH) |
| Water Penetration | 24 h |
| Water Penetration Test Method | IEC 60794-1 F5 |

Environmental Test Specifications

| | |
|--------------------------------------|--------------------------------------|
| Temperature Cycle | -30 °C to +70 °C (-22 °F to +158 °F) |
| Temperature Cycle Test Method | IEC 60794-1-2 F1 |

Packaging and Weights

| | |
|---------------------|--------------------------|
| Cable weight | 60 kg/km 40.318 lb/kft |
|---------------------|--------------------------|

Included Products

| | |
|----------|---|
| CS-5K-LT | - LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber |
|----------|---|

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

LazrSPEED® 550

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/mm ² 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 |

CS-5K-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 | 1,110 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 |

Regulatory Compliance/Certifications

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



CS-5K-LT

* 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