



Fiber indoor/outdoor cable, 12-fiber, OM4, ULSZH, armored loose tube, gel-filled, Meters jacket marking, Black jacket color

Product Classification

| | |
|------------------------------|-------------------------------------|
| Regional Availability | Asia 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 OPTICAL CABLE 760242754 12X50/125 OM4 ULSZH (Serial NUMBER) (METRE MARK) |
| Fibers per Subunit, quantity | 12 |
| Total Fiber Count | 12 |

Dimensions

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|-------------------------------------|--------------------|
| Buffer Tube/Subunit Diameter | 2.8 mm 0.11 in |
| Diameter Over Jacket | 10.5 mm 0.413 in |

Mechanical Specifications

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|--|-------------------------|
| Minimum Bend Radius, loaded | 210 mm 8.268 in |
| Minimum Bend Radius, unloaded | 125 mm 4.921 in |
| Tensile Load, short term, maximum | 2700 N 606.984 lbf |
| Cable Crush Resistance, maximum | 30 N/mm 171.304 lb/in |
| Compression Test Method | IEC 60794-1 E3 |

760242754 | C-012-CA-5K-M12BK/28G

Impact 5 N-m | 44.254 in lb

Impact Test Method IEC 60794-1 E4

Twist 5 cycles

Twist Test Method IEC 60794-1 E7

Optical Specifications

Fiber Type OM4, LazrSPEED® | OM4, LazrSPEED®

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-492AAAD (OM4)

Environmental Specifications

Operating Temperature -30 °C to +70 °C (-22 °F to +158 °F)

Environmental Space Universal Low Smoke Zero Halogen (ULSZH)

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration Test Method IEC 60794-1 F5

Environmental Test Specifications

Temperature Cycle Test Method IEC 60794-1 F1

Packaging and Weights

Cable weight 147 kg/km | 98.779 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

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|--|--|
| 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

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|---|---------------------------------------|
| 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

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|--|---------------------|
| 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 |
| 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 (OM4) IEC 60793-2-10, A1 (OM4) |

Environmental Specifications

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|--|--------------------|
| 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) |

CS-5K-LT

up to 95% relative humidity