2-1716211-2 | C-012-L2-5K-M12BK/40G/GY/FS/B



LazrSPEED® Indoor/Outdoor, 120 min Fire Survival, Low Smoke Zero Halogen (LSZH), Gel-Filled, Central Loose Tube cable. Provides Rodent Resistance.

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series C-L2

General Specifications

Armor Type Corrugated steel

Cable TypeLoose tubeSubunit TypeGel-filledJacket ColorBlackJacket MarkingMeters

Jacket Marking Method Inkjet

Jacket Marking Text COMMSCOPE GB SYSTEM F O CABLE X-1716211-2 INT/EXT FIRE

SURVIVAL 12 X 50/125 OM4 [Serial NUMBER] [METRE MARK]

Fibers per Subunit, quantity 12

Total Fiber Count 12

Dimensions

Cable Length2000 m | 6,561.68 ftBuffer Tube/Subunit Diameter4 mm | 0.157 inDiameter Over Jacket12.7 mm | 0.5 in

Mechanical Specifications

Minimum Bend Radius, loaded330 mm1 22.992 inMinimum Bend Radius, unloaded255 mm1 10.039 inTensile Load, long term, maximum400 N | 89.924 lbf

COMMSC PE°

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Tensile Load, short term, maximum 1400 N | 314.733 lbf

Compression 30 N/mm | 171.304 lb/in

Compression Test Method IEC 60794-1 E3

Impact 10 N-m | 88.507 in lb

Impact Test Method IEC 60794-1 E4

Strain See long and short term tensile loads

Strain Test Method IEC 60794-1 E1

Twist 5 cycles

Twist Test Method IEC 60794-1 E7

Optical Specifications

Fiber Type OM4, LazrSPEED®

Optical Specifications, Wavelength Specific

Attenuation, maximum 1.00 dB/km @ 1,310 nm | 3.00 dB/km @ 850 nm

Standards Compliance TIA-492AAAD (OM4)

Environmental Specifications

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

Storage Temperature $-40 \,^{\circ}\text{C}$ to $+70 \,^{\circ}\text{C}$ ($-40 \,^{\circ}\text{F}$ to $+158 \,^{\circ}\text{F}$)

Cable Qualification Standards EN 187105 | IEC 60794-1-2

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 CPR Cable EuroClass Smoke Ratings1bEN50575 CPR Cable EuroClass Droplets Ratingd0EN50575 CPR Cable EuroClass Acidity Ratinga1

Environmental Space Aerial, lashed | Buried | Universal Low Smoke Zero Halogen (ULSZH)

Flame Test Listing EN 50399 | IEC 60332-1-2

Flame Test Method IEC 60331-25 (120) Fire resistance: 120 minutes at 750 °C (no fiber

break) | IEC 60332-1-2

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration Test Method IEC 60794-1 F5

Environmental Test Specifications

COMMSCOPE®

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Low High Bend Test Method IEC 60794-1 E11

Temperature Cycle $-25 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-13 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$

Temperature Cycle Test Method IEC 60794-1 F1

Packaging and Weights

Cable weight 216 kg/km | 145.145 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-5K-LT – LazrSPEED® 550 OM4 Bend-Insensitive Multimode

Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



LazrSPFFD® 550 OM4 Bend-Insensitive Multimode Fiber

LazrSPEED® 550

Product Classification

PortfolioCommScope®Product TypeOptical 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

Proof Test 689.476 N/mm² | 100000 psi

Mechanical Specifications

Core Diameter Tolerance

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

±2.5 µm

 $1.5 \, \mu m$

Coating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 18

COMMSCOPE®

CS-5K-LT

Optical Specifications

Numerical Aperture 0.2

Numerical Aperture Tolerance±0.015Point Defects, maximum0.15 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, 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

* Footnotes

Temperature Dependence, maximum Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)

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CS-5K-LT

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

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