760229948 | R-144-DZ-5G-FMULM



Fiber indoor cable, LazrSPEED® Riser Distribution, interlocking aluminum armored, Multimode OM5, 144 fiber multi-unit with 12 fiber subunits, Lime-green jacket color, Feet cable marking

Product Classification

Regional Availability

Asia | Australia/New Zealand | Latin America | Middle East

/Africa | North America

Portfolio CommScope®

Product Type Fiber indoor cable

Product Series R-DZ

General Specifications

Armor Type Interlocking aluminum

Cable TypeDistributionConstruction TypeArmoredSubunit TypeGel-freeJacket ColorLime green

Jacket MarkingFeetSubunit, quantity12Fibers per Subunit, quantity12Total Fiber Count144

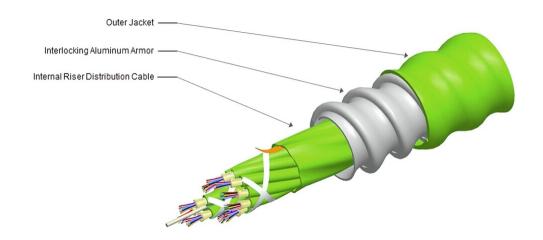
Dimensions

Buffer Tube/Subunit Diameter5.95 mm | 0.234 inDiameter Over Armor32.39 mm | 1.275 inDiameter Over Jacket34.4 mm | 1.354 in

Representative Image



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Mechanical Specifications

Minimum Bend Radius, loaded 688 mm | 27.087 in

Minimum Bend Radius, unloaded 482 mm | 18.976 in

Tensile Load, long term, maximum 400 N \mid 89.924 lbf

Tensile Load, short term, maximum 1335 N | 300.12 lbf

Compression 85 N/mm | 485.363 lb/in

Compression Test Method FOTP-41 | IEC 60794-1 E3

Flex 25 cycles

Flex Test Method FOTP-104 | IEC 60794-1 E6

Impact 35 N-m | 309.776 in lb

Impact Test Method FOTP-25 | IEC 60794-1 E4

Strain See long and short term tensile loads

Strain Test Method FOTP-33 | IEC 60794-1 E1

Twist 10 cycles

Twist Test Method FOTP-85 | IEC 60794-1 E7

Vertical Rise, maximum 49 m | 160.761 ft

Optical Specifications

Fiber Type OM5, LazrSPEED® wideband | OM5, LazrSPEED® wideband

Environmental Specifications

Installation temperature -20 °C to +70 °C (-4 °F to +158 °F)

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

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

Cable Qualification Standards ANSI/ICEA S-83-596 | Telcordia GR-409

Environmental Space Riser

Flame Test Listing NEC OFCR (ETL) and c(ETL)

Flame Test Method UL 1666

Environmental Test Specifications

Heat Age $-20 \, ^{\circ}\text{C} \text{ to } +85 \, ^{\circ}\text{C} \, (-4 \, ^{\circ}\text{F to } +185 \, ^{\circ}\text{F})$

Heat Age Test Method IEC 60794-1 F9

Low High Bend $-20 \, ^{\circ}\text{C} \text{ to } +70 \, ^{\circ}\text{C} \, (-4 \, ^{\circ}\text{F to } +158 \, ^{\circ}\text{F})$

Low High Bend Test Method FOTP-37 | IEC 60794-1 E11

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

Temperature Cycle Test Method FOTP-3 | IEC 60794-1 F1

Packaging and Weights

Cable weight 830 kg/km | 557.734 lb/kft

Regulatory Compliance/Certifications

Agency Classification

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

Included Products

CS-5G-TB - LazrSPEED® OM5 WideBand Multimode

Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



LazrSPEED® OM5 WideBand Multimode Fiber

LazrSPFFD®

Product Classification

Portfolio CommScope®
Product Type Optical fiber

General Specifications

Cladding Diameter 125 µm **Cladding Diameter Tolerance** ±0.8 µm Cladding Non-Circularity, maximum 0.7 % **Coating Diameter (Colored)** 254 µm **Coating Diameter (Uncolored)** 242 µm **Coating Diameter Tolerance (Colored)** ±7 µm **Coating Diameter Tolerance (Uncolored)** ±5 µm Coating/Cladding Concentricity Error, maximum 12 µm **Core Diameter** 50 µm **Core Diameter Tolerance** ±2.5 µm Core/Clad Offset, maximum 1 µm

Proof Test 689.476 N/mm² | 100000 psi

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

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 4.5 N | 1.012 lbf



CS-5G-TB

Coating Strip Force, minimum 0.9 N | 0.202 lbf

Dynamic Fatigue Parameter, minimum 18

Optical Specifications

Numerical Aperture 0.2

Numerical Aperture Tolerance ±0.010

Point Defects, maximum 0.15 dB

Zero Dispersion Slope, maximum (0M5) -412/(840(1-(λ0/840)^4)) ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum 1328 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 | 2.20 dB/km @ 953 nm | 3.00 dB/km @

850 nm

Bandwidth, Laser, minimum 2,600 MHz-km @ 953 nm | 4,700 MHz-km @ 850 nm | 500 MHz-km

@ 1,300 nm

Bandwidth, OFL, minimum 1,950 MHz-km @ 953 nm | 3,500 MHz-km @ 850 nm | 500 MHz-km

@ 1,300 nm

Index of Refraction 1.478 @ 1,300 nm | 1.483 @ 850 nm

Standards Compliance ANSI/TIA-568.3-D wideband multimode fiber cable | IEC 60793-2-10,

edition 6, model A1a.4 | ISO 11801-1 cabled optical fiber performance

category OM5 | TIA-492AAAE (OM5)

Environmental Specifications

Heat Aging, maximum 0.10 dB/km @ 85 °C

Temperature Dependence, maximum0.1 dB/kmTemperature Humidity Cycling, maximum0.1 dB/km

Water Immersion, maximum 0.10 dB/km @ 23 °C

Regulatory Compliance/Certifications

Agency Classification

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

* Footnotes

COMMSCOPE®

CS-5G-TB

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