760127209 | R-048-DZ-5L-FMUAQ



Fiber indoor cable, LazrSPEED® Riser Distribution, interlocking aluminum armored, Multimode OM3, 48 fiber multi-unit with 12 fiber subunits, gelfree, Feet jacket marking, Aqua jacket color

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 Type
 Distribution

Construction Type Armored

Subunit Type Gel-free

Jacket Color Aqua

Jacket Marking Feet

Subunit, quantity 4

Fibers per Subunit, quantity 12

Total Fiber Count 48

Dimensions

Buffer Tube/Subunit Diameter 5.95 mm | 0.234 in

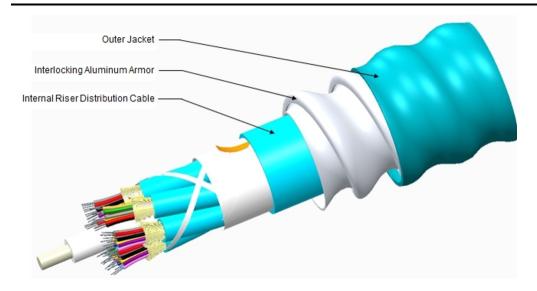
Diameter Over Armor 20.96 mm | 0.825 in

Diameter Over Jacket 23 mm | 0.906 in

Representative Image



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Mechanical Specifications

Minimum Bend Radius, loaded

Minimum Bend Radius, unloaded

Tensile Load, long term, maximum

Tensile Load, short term, maximum

Compression

Compression Test Method

Flex

Flex Test Method

Impact

Impact Test Method

Strain

Strain Test Method

Twist

Twist Test Method

Vertical Rise, maximum

Optical Specifications

Fiber Type

345 mm | 13.583 in

230 mm | 9.055 in

400 N | 89.924 lbf

1335 N | 300.12 lbf

85 N/mm | 485.363 lb/in

FOTP-41 | IEC 60794-1 E3

25 cycles

FOTP-104 | IEC 60794-1 E6

35 N-m | 309.776 in lb

FOTP-25 | IEC 60794-1 E4

See long and short term tensile loads

FOTP-33 | IEC 60794-1 E1

10 cycles

FOTP-85 | IEC 60794-1 E7

93 m | 305.118 ft

OM3, LazrSPEED® 300 | OM3, LazrSPEED® 300

Environmental Specifications

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

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

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 °C to +70 °C (-4 °F to +158 °F)

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

Packaging and Weights

Cable weight 438 kg/km | 294.322 lb/kft

Regulatory Compliance/Certifications

Agency Classification

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

Included Products

CS-5L-TB – LazrSPEED® 300 OM3 Bend-Insensitive Multimode

Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



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)** $254 \, \mu m$ **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 $1.5 \, \mu m$

Proof Test 689.476 N/mm² | 100000 psi

 $\begin{tabular}{lll} \textbf{Tight Buffer Diameter} & 900 \ \mu m \\ \begin{tabular}{lll} \textbf{Tight Buffer Diameter Tolerance} & \pm 40 \ \mu m \\ \end{tabular}$

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



CS-5L-TB

Coating Strip Force, minimum 1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 18

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 1,020 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 | 0.88 ps/m @ 1,300 nm

Differential Mode Delay NoteSuperior 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 TIA-492AAAC (OM3)

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

COMMSCOPE®

CS-5L-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

