P-048-DZ-5M-FMU



Fiber indoor cable, LazrSPEED® Plenum Distribution, interlocking aluminum armored with plenum jacket, Multimode OM2+, 48 fiber multiunit with 12 fiber subunits, 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 P-DZ

General Specifications

Armor Type Interlocking aluminum

Cable TypeDistribution

Construction Type Armored

Fiber Type, quantity 48

Fibers per Subunit, quantity 12

Jacket Marking Feet

Subunit Type Gel-free

Subunit, quantity 4

Total Fiber Count 48

Dimensions

Buffer Tube/Subunit Diameter 5.77 mm | 0.227 in

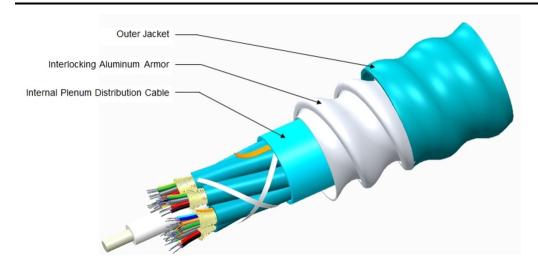
Diameter Over Armor 20.96 mm | 0.825 in

Diameter Over Jacket 23 mm | 0.906 in

Representative Image



P-048-DZ-5M-FMU



Mechanical Specifications

Minimum Bend Radius, loaded 460 mm | 18.11 in

Minimum Bend Radius, unloaded 322 mm | 12.677 in

Tensile Load, long term, maximum 400 N | 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 91 m | 298.556 ft

Optical Specifications

Fiber Type OM2+, LazrSPEED® 150 | OM2+, LazrSPEED® 150

Environmental Specifications

Installation temperature 0 °C to +70 °C (+32 °F to +158 °F)

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

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 Plenum

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

Flame Test Method NFPA 262

Environmental Test Specifications

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

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 449 kg/km | 301.714 lb/kft

Regulatory Compliance/Certifications

Agency

Classification

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system



Included Products

CS-5M-TB

- LazrSPEED® 150 OM2+ Bend-Insensitive Multimode

Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



LazrSPEED® 150 OM2+ Bend-Insensitive Multimode Fiber

LazrSPFFD® 150

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

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

Mechanical Specifications

 Macrobending, 15 mm mandrel, 2 turns
 0.20 dB @ 850 nm
 | 0.50 dB @ 1,300 nm

 Macrobending, 30 mm mandrel, 2 turns
 0.10 dB @ 850 nm
 | 0.30 dB @ 1,300 nm

Coating Strip Force, maximum $8.9 \, \text{N}$ $2.001 \, \text{lbf}$ Coating Strip Force, minimum $1.3 \, \text{N}$ $0.292 \, \text{lbf}$

COMMSCOPE®

CS-5M-TB

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 600 m @ 1,300 nm | 800 m @ 850 nm

10 Gbps Ethernet Distance 150 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
 500 MHz-km @ 1,300 nm | 950 MHz-km @ 850 nm

 Bandwidth, OFL, minimum
 500 MHz-km @ 1,300 nm | 700 MHz-km @ 850 nm

 Differential Mode Delay
 0.70 ps/m @ 850 nm | 0.88 ps/m @ 1,300 nm

Index of Refraction 1.479 @ 1,300 nm | 1.483 @ 850 nm

Standards Compliance TIA-492AAAB (OM2+)

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

COMMSC PE°

CS-5M-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

