N-144-MP-5G-F12



Fiber indoor cable, LazrSPEED® Low Smoke Zero Halogen Riser MPO Trunk, 144 fiber multi-unit with 12 fiber subunits, Gel-free, Multimode OM5, Feet jacket marking, Dca flame rating

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North

America

Portfolio CommScope®

Product Type Fiber indoor cable

Product Series N-MP

General Specifications

Cable Type MPO trunk cable

Construction Type Non-armored

Subunit Type Gel-free

Jacket Marking Feet

Subunit, quantity 12

Fibers per Subunit, quantity 12

Total Fiber Count 144

Dimensions

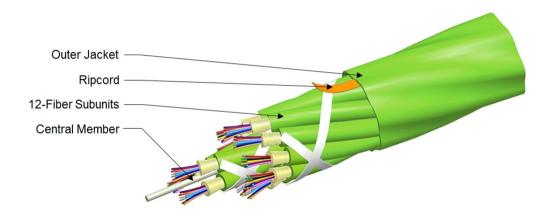
Buffer Tube/Subunit Diameter 3 mm | 0.118 in

Diameter Over Jacket 14.22 mm | 0.56 in

Representative Image



N-144-MP-5G-F12



Mechanical Specifications

Minimum Bend Radius, loaded 200 mm | 7.874 in

Minimum Bend Radius, unloaded 133 mm | 5.236 in

Tensile Load, long term, maximum 400 N | 89.924 lbf

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

Compression 10 N/mm | 57.101 lb/in

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

Flex 300 cycles

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

Impact 2.94 N-m | 26.021 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 280 m | 918.635 ft

Optical Specifications

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

Environmental Specifications

Installation temperature $-20 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ (-4 °F to +140 °F)

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

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Storage Temperature $-40 \,^{\circ}\text{C}$ 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

EN50575 CPR Cable EuroClass Fire PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd1EN50575 CPR Cable EuroClass Acidity Ratinga1

Environmental Space Low Smoke Zero Halogen (LSZH) | Riser

Flame Test Listing NEC OFNR-ST1 (ETL) and c(ETL)

Flame Test Method | IEC 60332-3 | IEC 60754-2 | IEC 61034-2 | UL 1666 | UL 1685

Environmental Test Specifications

Heat Age -20 °C to +85 °C (-4 °F to +185 °F)

Heat Age Test Method IEC 60794-1 F9

Low High Bend $-20 \,^{\circ}\text{C}$ to $+70 \,^{\circ}\text{C}$ (-4 °F to +158 °F)Low High Bend Test MethodFOTP-37 | IEC 60794-1 E11Temperature Cycle $-20 \,^{\circ}\text{C}$ to $+70 \,^{\circ}\text{C}$ (-4 °F to +158 °F)

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

Packaging and Weights

Cable weight 146 kg/km | 98.107 lb/kft

Regulatory Compliance/Certifications

Agency Classification

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

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

CENELEC

Included Products

CS-5G-MP – LazrSPEED® OM5 WideBand Multimode

Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



LazrSPEED®

LazrSPEED® OM5 WideBand Multimode Fiber

Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Diameter 125 µm **Cladding Diameter Tolerance** ±5 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

Proof Tensile Stress 100,000 psi (0.69 GPa)

Mechanical Specifications

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

1 µm

Coating Strip Force, maximum $4.5 \, \text{N}$ | $1.012 \, \text{lbf}$ Coating Strip Force, minimum $0.9 \, \text{N}$ | $0.202 \, \text{lbf}$

Dynamic Fatigue Parameter, minimum 18

Optical Specifications

Numerical Aperture 0.2

COMMSCOPE®

CS-5G-MP

Numerical Aperture Tolerance ±0.010

Point Defects, maximum 0.15 dB

Zero Dispersion Slope, maximum (OM5) $-412/(840(1-(\lambda 0/840)^4)))$ ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum1328 nmZero Dispersion Wavelength, minimum1297 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-492AAAF (OM5) | ANSI/TIA-568.3 (OM5) | IEC 60793-2-10,

A1 (OM5) | ISO/IEC 11801-1 cabled optical fiber performance category

OM5

Environmental Specifications

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

Temperature Dependence, maximum 0.1 dB/km
Temperature Humidity Cycling, maximum 0.1 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

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

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