## 760249682 | N-048-MZ-5G-F12AQ/20T/B2



Fiber indoor cable, LazrSPEED® Riser/LSZH rated, MPO Trunk, interlocking aluminum armored, Multimode OM5, 12 fiber, Feet jacket marking, Lime-green jacket color, B2ca 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-MZ

General Specifications

Armor Type Interlocking aluminum

Cable TypeMPO trunk cable

Construction TypeArmoredSubunit TypeGel-free

Jacket Color Lime green

Jacket MarkingFeetSubunit, quantity4

Fibers per Subunit, quantity 12

Total Fiber Count 48

**Dimensions** 

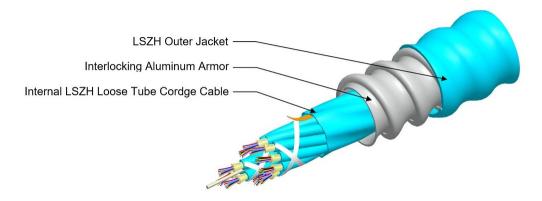
Buffer Tube/Subunit Diameter2 mm | 0.079 inDiameter Over Armor13.3 mm | 0.524 in

**Diameter Over Jacket** 15.4 mm | 0.606 in

Representative Image



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### Mechanical Specifications

Minimum Bend Radius, loaded231 mm9.094 inMinimum Bend Radius, unloaded154 mm6.063 inTensile Load, long term, maximum200 N | 44.962 lbfTensile Load, short term, maximum667 N | 149.948 lbf

 Compression
 85 N/mm
 | 485.363 lb/in

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

Flex 300 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** 96 m | 314.961 ft

**Optical Specifications** 

**Fiber Type** OM5, LazrSPEED® wideband

### **Environmental Specifications**

Installation temperature  $0 \, ^{\circ}\text{C} \, \text{to} +50 \, ^{\circ}\text{C} \, (+32 \, ^{\circ}\text{F} \, \text{to} +122 \, ^{\circ}\text{F})$ Operating Temperature  $0 \, ^{\circ}\text{C} \, \text{to} +60 \, ^{\circ}\text{C} \, (+32 \, ^{\circ}\text{F} \, \text{to} +140 \, ^{\circ}\text{F})$ Storage Temperature  $-40 \, ^{\circ}\text{C} \, \text{to} +70 \, ^{\circ}\text{C} \, (-40 \, ^{\circ}\text{F} \, \text{to} +158 \, ^{\circ}\text{F})$ 

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

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 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 OFCR-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** 0 °C to +85 °C (+32 °F to +185 °F)

Heat Age Test Method IEC 60794-1 F9

**Low High Bend**  $0 \,^{\circ}\text{C} \, \text{to} + 50 \,^{\circ}\text{C} \, (+32 \,^{\circ}\text{F to} + 122 \,^{\circ}\text{F})$  **Low High Bend Test Method** FOTP-37 | IEC 60794-1 E11

**Temperature Cycle** 0 °C to +60 °C (+32 °F to +140 °F)

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

Packaging and Weights

**Cable weight** 213 kg/km | 143.129 lb/kft

#### 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** ±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

**Proof Test** 689.476 N/mm<sup>2</sup> | 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 µm

Coating Strip Force, maximum4.5 N | 1.012 lbfCoating Strip Force, minimum0.9 N | 0.202 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 (0M5)** -412/(840(1-(λ0/840)^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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