# 760212258 | N-048-CN-RB-F12AQ/5Y/99E



Fiber Indoor Cable, LSZH Riser, All-Dielectric, Central Tube Ribbon, Multimode, OM3, bend insensitive, 48 Fibers, Gel-free, Feet jacket marking, Aqua jacket color

#### **Product Classification**

Regional Availability

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

America

Portfolio CommScope®

Product Type Fiber indoor cable

Product Series N-CN

General Specifications

Cable TypeRibbon central tube

Construction Type Non-armored

Subunit Type Gel-free

Fibers per Ribbon, quantity 12

Jacket Color Aqua

**Jacket Marking** Feet

Total Fiber Count 48

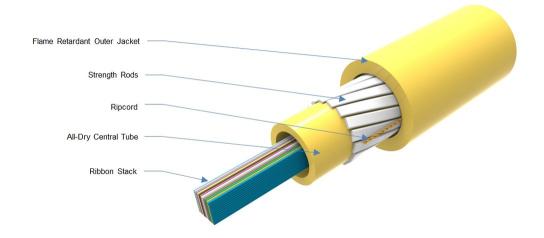
**Dimensions** 

Buffer Tube/Subunit Diameter6 mm | 0.236 inDiameter Over Jacket9.4 mm | 0.37 in

Representative Image



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### Mechanical Specifications

Minimum Bend Radius, loaded 188 mm | 7.402 in

Minimum Bend Radius, unloaded 94 mm | 3.701 in

**Tensile Load, long term, maximum** 334 N | 75.086 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 25 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

**Optical Specifications** 

Fiber Type OM3, bend insensitive | OM3, bend insensitive

## **Environmental Specifications**

Installation temperature  $0 \,^{\circ}\text{C to} + 70 \,^{\circ}\text{C (+32 °F to} + 158 \,^{\circ}\text{F)}$ Operating Temperature  $-20 \,^{\circ}\text{C to} + 70 \,^{\circ}\text{C (-4 °F to} + 158 \,^{\circ}\text{F)}$ 

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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

Environmental Space Low Smoke Zero Halogen (LSZH) | Riser

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

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

**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** 90 kg/km | 60.477 lb/kft

### Regulatory Compliance/Certifications

Agency Classification

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

#### Included Products

CS-5Y-RB - 50µm OM3 Bend-Insensitive Multimode

Fiber

#### \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable



# CS-5Y-RB

#### 50µm OM3 Bend-Insensitive Multimode Fiber

#### **Product Classification**

PortfolioCommScope®Product TypeOptical fiber

## General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance** ±5 µm 1 % **Cladding Non-Circularity, maximum Coating Diameter (Colored)** 250 um **Coating Diameter (Uncolored)** 245 µm **Coating Diameter Tolerance (Colored)** ±15 µm **Coating Diameter Tolerance (Uncolored)** ±10 μm Coating/Cladding Concentricity Error, maximum 12 µm **Core Diameter** 50 µm **Core Diameter Tolerance** ±3 µm Core/Clad Offset, maximum 1 µm

**Proof Tensile Stress** 100,000 psi (0.69 GPa)

## 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

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

**Dynamic Fatigue Parameter, minimum** 18

## **Optical Specifications**

 Numerical Aperture
 0.2

 Numerical Aperture Tolerance
 ±0.015

 Point Defects, maximum
 0.2 dB

**Zero Dispersion Slope, maximum** 0.105 ps/[km-nm-nm]

**Zero Dispersion Wavelength, maximum** 1340 nm

**COMMSCOPE®** 

## CS-5Y-RB

#### Zero Dispersion Wavelength, minimum

1295 nm

#### Optical Specifications, Wavelength Specific

**Attenuation, maximum** 1.50 dB/km @ 1,300 nm | 3.50 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 Note
 Superior to TIA-492AAAC and IEC 60793-2-10 at 850 nm

**Index of Refraction** 1.478 @ 1,300 nm | 1.482 @ 850 nm

Standards Compliance TIA-492AAAC (OM3)

### **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

**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

