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

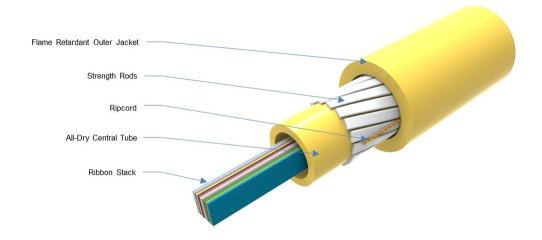
Dimensions

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

Page 2 of 5



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

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 μ m
Cladding Diameter Tolerance $\pm 1.0 \ \mu$ m
Cladding Non-Circularity, maximum 1 %
Coating Diameter (Colored) 250 μ m
Coating Diameter (Uncolored) 245 μ m
Coating Diameter Tolerance (Colored) $\pm 15 \ \mu$ m

 Coating Diameter Tolerance (Colored)
 ±10 μm

 Coating/Cladding Concentricity Error, maximum
 12 μm

 Core Diameter
 50 μm

 $\begin{tabular}{lll} \textbf{Core Diameter Tolerance} & \pm 3 \ \mu m \\ \end{tabular}$ $\begin{tabular}{lll} \textbf{Core/Clad Offset, maximum} & 1 \ \mu m \\ \end{tabular}$

Proof Test 689.476 N/mm² | 100000 psi

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

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

