# 760213579 | D-024-CN-RB-F12NS/5L/99A



Fiber OSP Cable, Non-Armored, All-Dielectric, Arid-Core, Dry Central Tube Ribbon, 24 fibers, Multimode OM3 bend insensitive, Gel-free, Feet jacket marking, Black jacket color

#### **Product Classification**

Regional Availability

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

America

Portfolio CommScope®

**Product Type** Fiber OSP cable

**Product Series** D-CN

General Specifications

Cable Type Ribbon central tube

Construction Type Non-armored

**Subunit Type** Gel-free

Fibers per Ribbon, quantity 12

Jacket Color Black

Jacket Marking Feet

Total Fiber Count 24

**Dimensions** 

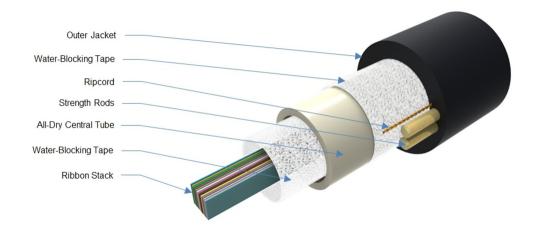
**Buffer Tube/Subunit Diameter** 6 mm | 0.236 in

**Diameter Over Jacket** 12.6 mm | 0.496 in

Representative Image



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## Mechanical Specifications

Minimum Bend Radius, loaded 251.5 mm | 9.902 in

Minimum Bend Radius, unloaded 127 mm | 5 in

**Tensile Load, long term, maximum** 800 N | 179.847 lbf

**Tensile Load, short term, maximum** 2700 N | 606.984 lbf

**Compression** 22 N/mm | 125.623 lb/in

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

Flex 25 cycles

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

**Impact** 4.4 N-m | 38.943 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  $-30 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (-22  $^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

Operating Temperature  $-40 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+158 \,^{\circ}\text{F}$ )

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Storage Temperature -40 °C to +75 °C (-40 °F to +167 °F)

Cable Qualification Standards ANSI/ICEA S-87-640 | Telcordia GR-20

Environmental Space Aerial, lashed | Buried

Jacket UV Resistance UV stabilized

Water Penetration 24 h

**Water Penetration Test Method** FOTP-82 | IEC 60794-1 F5

**Environmental Test Specifications** 

**Heat Age**  $-40 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$ 

Heat Age Test Method IEC 60794-1 F9

**Low High Bend**  $-30 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (-22  $^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

**Low High Bend Test Method** FOTP-37 | IEC 60794-1 E11

**Temperature Cycle**  $-40 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$ 

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

Packaging and Weights

**Cable weight** 130 kg/km | 87.356 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** ±1.0 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 Test** 689.476 N/mm<sup>2</sup> | 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

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

