# 760214031 | D-060-CA-RB-F12NS/5K/99A



Fiber OSP cable, Steel Armored, Arid-Core, Dry Central Tube Ribbon, 60 fiber, Multimode OM4, bend insensitive, 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-CA

General Specifications

Armor Type Corrugated steel

Cable Type Ribbon central tube

Construction TypeArmoredSubunit TypeGel-free

Fibers per Ribbon, quantity 12

Jacket Color Black

Jacket Marking Feet

Total Fiber Count 60

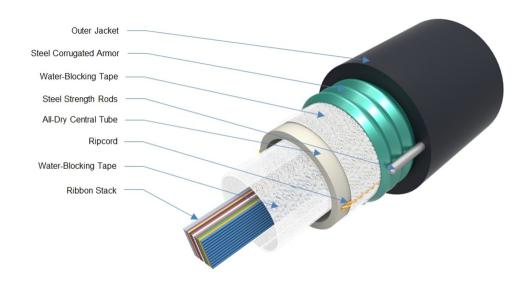
Dimensions

Buffer Tube/Subunit Diameter7.9 mm | 0.311 inDiameter Over Jacket15.5 mm | 0.61 in

Representative Image



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### Mechanical Specifications

Minimum Bend Radius, loaded 309.9 mm | 12.201 in

Minimum Bend Radius, unloaded 154.9 mm | 6.098 in

**Tensile Load, long term, maximum**800 N | 179.847 lbf **Tensile Load, short term, maximum**2700 N | 606.984 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** OM4, bend insensitive | OM4, bend insensitive

### **Environmental Specifications**



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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  $+158 \,^{\circ}\text{F}$ )

Storage Temperature  $-40 \,^{\circ}\text{C}$  to  $+75 \,^{\circ}\text{C}$  ( $-40 \,^{\circ}\text{F}$  to  $+167 \,^{\circ}\text{F}$ )

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 °C to +85 °C (-40 °F to +185 °F)

**Heat Age Test Method** IEC 60794-1 F9

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

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

**Temperature Cycle** -40 °C to +70 °C (-40 °F to +158 °F)

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

Packaging and Weights

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

Regulatory Compliance/Certifications

Agency Classification

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

Included Products

CS-5X-RB – 50µm OM4 Bend-Insensitive Multimode

Fiber

#### \* Footnotes

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



# CS-5X-RB

#### 50µm OM4 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-5X-RB

#### Zero Dispersion Wavelength, minimum

1295 nm

### Optical Specifications, Wavelength Specific

**1 Gbps Ethernet Distance** 1,000 m @ 850 nm | 550 m @ 1,300 nm

**10 Gbps Ethernet Distance** 550 m @ 850 nm

**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
 4,700 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm

 Bandwidth, OFL, minimum
 3,500 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-492AAAD (OM4)

### **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

