760213959 | D-096-CA-RB-F12NS/5L/99A



Fiber OSP cable, Steel Armored, Arid-Core, Dry Central Tube Ribbon, Multimode OM3, 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 Type	Armored
Subunit Type	Gel-free
Fibers per Ribbon, quantity	12
Jacket Color	Black
Jacket Marking	Feet
Total Fiber Count	96
Dimensions	
Buffer Tube/Subunit Diameter	7.9 mm 0.311 in
Diameter Over Jacket	15.5 mm 0.61 in

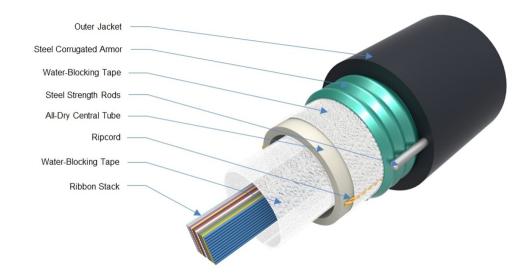
Representative Image

Page 1 of 5

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: June 6, 2024



760213959 | D-096-CA-RB-F12NS/5L/99A



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
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

Page 2 of 5

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: June 6, 2024

COMMSCOPE°

760213959 | D-096-CA-RB-F12NS/5L/99A

Installation temperature -30 °C to	+60 °C (-22 °F to +140 °F)
Operating Temperature -40 °C to	+70 °C (-40 °F to +158 °F)
Storage Temperature -40 °C to	+75 °C (-40 °F to +167 °F)
Cable Qualification Standards ANSI/ICE	A S-87-640 Telcordia GR-20
Environmental Space Aerial, las	shed Buried
Jacket UV Resistance UV stabil	ized
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 °C to +60 °C (-22 °F to +140 °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-5Y-RB – 50µm OM3 Bend-Insensitive Multimode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: June 6, 2024

COMMSCOPE°

50µm OM3 Bend-Insensitive Multimode Fiber

Product Classification

Product TypeOptical fiberGeneral Specifications125 μmCladding Diameter125 μmCladding Diameter Tolerance±1.0 μmCladding Non-Circularity, maximum1%Coating Diameter (Colored)250 μmCoating Diameter (Uncolored)245 μmCoating Diameter Tolerance (Colored)±15 μmCoating Diameter Tolerance (Uncolored)±10 μmCoating Diameter Tolerance (Uncolored)±10 μmCoating Diameter Tolerance (Uncolored)±10 μmCoating Diameter Tolerance (Uncolored)±10 μmCore Diameter50 μmFore Diameter Tolerance±3 μmProof Test689.476 N/mm² 100000 psi	Portfolio	CommScope®
Cladding Diameter125 μmCladding Diameter Tolerance±1.0 μmCladding Non-Circularity, maximum1%Coating Diameter (Colored)250 μmCoating Diameter (Uncolored)245 μmCoating Diameter Tolerance (Colored)±15 μmCoating Diameter Tolerance (Uncolored)±10 μmCoating/Cladding Concentricity Error, maximum12 μmCore Diameter Tolerance50 μmCore Diameter Tolerance±10 μmCore Diameter Tolerance12 μm	Product Type	Optical fiber
Cladding Diameter Tolerance±1.0 μmCladding Non-Circularity, maximum1 %Coating Diameter (Colored)250 μmCoating Diameter (Uncolored)245 μmCoating Diameter Tolerance (Colored)±15 μmCoating Diameter Tolerance (Uncolored)±10 μmCoating Diameter Tolerance (Uncolored)±0 μmCoating Diameter Tolerance (Uncolored)±10 μmCoating Diameter Tolerance (Uncolored)±10 μmCoating Cladding Concentricity Error, maximum12 μmCore Diameter50 μmCore Diameter Tolerance±10 μm	General Specifications	
Cladding Non-Circularity, maximum1 %Coating Diameter (Colored)250 μmCoating Diameter (Uncolored)245 μmCoating Diameter Tolerance (Colored)±15 μmCoating Diameter Tolerance (Uncolored)±10 μmCoating/Cladding Concentricity Error, maximum12 μmCore Diameter50 μmCore Diameter Tolerance±3 μmCore Diameter Tolerance±1 μm	Cladding Diameter	125 µm
Coating Diameter (Colored)250 μmCoating Diameter (Uncolored)245 μmCoating Diameter Tolerance (Colored)±15 μmCoating Diameter Tolerance (Uncolored)±10 μmCoating/Cladding Concentricity Error, maximum12 μmCore Diameter50 μmCore Diameter Tolerance±13 μmCore Diameter Tolerance±1 μm	Cladding Diameter Tolerance	±1.0 μm
Coating Diameter (Uncolored)245 μmCoating Diameter Tolerance (Colored)±15 μmCoating Diameter Tolerance (Uncolored)±10 μmCoating/Cladding Concentricity Error, maximum12 μmCore Diameter50 μmCore Diameter Tolerance±3 μmCore Diameter Tolerance1 μm	Cladding Non-Circularity, maximum	1 %
Coating Diameter Tolerance (Colored)±15 μmCoating Diameter Tolerance (Uncolored)±10 μmCoating/Cladding Concentricity Error, maximum12 μmCore Diameter50 μmCore Diameter Tolerance±3 μmCore/Clad Offset, maximum1 μm	Coating Diameter (Colored)	250 µm
Coating Diameter Tolerance (Uncolored)±10 μmCoating/Cladding Concentricity Error, maximum12 μmCore Diameter50 μmCore Diameter Tolerance±3 μmCore/Clad Offset, maximum1 μm	Coating Diameter (Uncolored)	245 µm
Coating/Cladding Concentricity Error, maximum12 μmCore Diameter50 μmCore Diameter Tolerance±3 μmCore/Clad Offset, maximum1 μm	Coating Diameter Tolerance (Colored)	±15 μm
Core Diameter50 μmCore Diameter Tolerance±3 μmCore/Clad Offset, maximum1 μm	Coating Diameter Tolerance (Uncolored)	±10 μm
Core Diameter Tolerance±3 μmCore/Clad Offset, maximum1 μm	Coating/Cladding Concentricity Error, maximum	12 µm
Core/Clad Offset, maximum 1 µm	Core Diameter	50 µm
	Core Diameter Tolerance	±3 µm
Proof Test 689.476 N/mm² 100000 psi	Core/Clad Offset, maximum	1 µm
	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
Coating Strip Force, maximum	8.9 N 2.001 lbf
Coating Strip Force, minimum	1.3 N 0.292 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

Page 4 of 5

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: May 18, 2024



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, 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

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: May 18, 2024

