

# R-024-DS-8F-FSU

Fiber indoor cable, Riser Distribution, 24 fiber single-unit, Singlemode G.657.A1, Feet jacket marking

## Product Classification

<b>Regional Availability</b>	Asia   Australia/New Zealand   Latin America   Middle East/Africa   North America
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber indoor cable
<b>Product Series</b>	R-DS

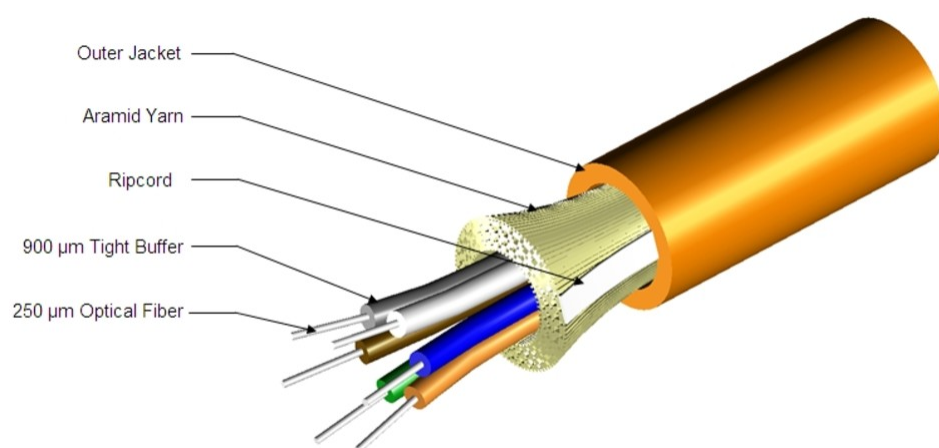
## General Specifications

<b>Cable Type</b>	Distribution
<b>Construction Type</b>	Non-armored
<b>Subunit Type</b>	Gel-free
<b>Jacket Marking</b>	Feet
<b>Total Fiber Count</b>	24

## Dimensions

<b>Diameter Over Jacket</b>	7.9 mm   0.311 in
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## Representative Image



## Mechanical Specifications

# R-024-DS-8F-FSU

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<b>Minimum Bend Radius, loaded</b>	118 mm   4.646 in
<b>Minimum Bend Radius, unloaded</b>	79 mm   3.11 in
<b>Tensile Load, long term, maximum</b>	400 N   89.924 lbf
<b>Tensile Load, short term, maximum</b>	1335 N   300.12 lbf
<b>Compression</b>	10 N/mm   57.101 lb/in
<b>Compression Test Method</b>	FOTP-41   IEC 60794-1 E3
<b>Flex</b>	100 cycles
<b>Flex Test Method</b>	FOTP-104   IEC 60794-1 E6
<b>Impact</b>	2.94 N-m   26.021 in lb
<b>Impact Test Method</b>	FOTP-25   IEC 60794-1 E4
<b>Strain</b>	See long and short term tensile loads
<b>Strain Test Method</b>	FOTP-33   IEC 60794-1 E1
<b>Twist</b>	10 cycles
<b>Twist Test Method</b>	FOTP-85   IEC 60794-1 E7
<b>Vertical Rise, maximum</b>	500 m   1,640.42 ft

## Environmental Specifications

<b>Installation temperature</b>	-20 °C to +70 °C (-4 °F to +158 °F)
<b>Operating Temperature</b>	-20 °C to +70 °C (-4 °F to +158 °F)
<b>Storage Temperature</b>	-40 °C to +70 °C (-40 °F to +158 °F)
<b>Cable Qualification Standards</b>	ANSI/ICEA S-83-596   Telcordia GR-409
<b>Environmental Space</b>	Riser
<b>Flame Test Listing</b>	NEC OFNR (ETL) and c(ETL)
<b>Flame Test Method</b>	UL 1666

## Environmental Test Specifications

<b>Heat Age</b>	-20 °C to +85 °C (-4 °F to +185 °F)
<b>Heat Age Test Method</b>	IEC 60794-1 F9
<b>Low High Bend</b>	-20 °C to +70 °C (-4 °F to +158 °F)
<b>Low High Bend Test Method</b>	FOTP-37   IEC 60794-1 E11
<b>Temperature Cycle</b>	-20 °C to +70 °C (-4 °F to +158 °F)
<b>Temperature Cycle Test Method</b>	FOTP-3   IEC 60794-1 F1

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## Packaging and Weights

**Cable weight** 50.4 kg/km | 33.867 lb/kft

## Regulatory Compliance/Certifications

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

## Included Products

CS-8F-TB	– Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber
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## \* Footnotes

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

# CS-8F-TB

Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber

## Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

## General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±0.7 µm
Cladding Non-Circularity, maximum	0.7 %
Coating Diameter (Colored)	249 µm
Coating Diameter (Uncolored)	242 µm
Coating Diameter Tolerance (Colored)	±13 µm
Coating Diameter Tolerance (Uncolored)	±5 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core/Clad Offset, maximum	0.5 µm
Proof Tensile Stress	100,000 psi (0.69 GPa)
Tight Buffer Diameter	900 µm
Tight Buffer Diameter Tolerance	±40 µm

## Dimensions

Fiber Curl, minimum	4 m   13.123 ft
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## Mechanical Specifications

Macrobending, 20 mm Ø mandrel, 1 turn	0.75 dB @ 1,550 nm   1.50 dB @ 1,625 nm
Macrobending, 30 mm Ø mandrel, 10 turns	0.25 dB @ 1,550 nm   1.00 dB @ 1,625 nm
Macrobending, 50 mm Ø mandrel, 100 turns	0.03 dB @ 1,550 nm   0.05 dB @ 1,625 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	20

## Optical Specifications

Cabled Cutoff Wavelength, maximum	1260 nm
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# CS-8F-TB

Point Defects, maximum	0.1 dB
Zero Dispersion Slope, maximum	0.09 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	1300 nm
Optical Specifications, Wavelength Specific	
Attenuation, maximum	0.50 dB/km @ 1,310 nm   0.50 dB/km @ 1,385 nm   0.50 dB/km @ 1,490 nm   0.50 dB/km @ 1,550 nm
Dispersion, maximum	18 ps(nm-km) at 1550 nm   3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm
Index of Refraction	1.467 @ 1,310 nm   1.467 @ 1,385 nm   1.468 @ 1,550 nm
Mode Field Diameter	8.6 μm @ 1,310 nm   9.8 μm @ 1,550 nm
Mode Field Diameter Tolerance	±0.4 μm @ 1310 nm   ±0.5 μm @ 1550 nm
Polarization Mode Dispersion Link Design Value, maximum	0.06 ps/sqrt(km)
Standards Compliance	ITU-T G.657.A1

## Environmental Specifications

Heat Aging, maximum	0.05 dB/km @ 85 °C
Temperature Dependence, maximum	0.05 dB/km
Temperature Humidity Cycling, maximum	0.05 dB/km
Water Immersion, maximum	0.05 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