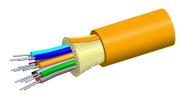
760026393 | R-024-DS-CM-FSUOR/8W012/6F012



Fiber indoor cable, TeraSPEED® Riser Distribution, Multimode composite, 24 fiber single-unit, Feet jacket marking, Orange jacket color

Product Classification

Regional Availability

Asia | Australia/New Zealand | Latin America | Middle East/Africa | North

America

Portfolio CommScope®

Product Type Fiber indoor cable

Product Series R-DS

General Specifications

 Cable Type
 Distribution

 Construction Type
 Non-armored

Subunit TypeGel-freeJacket ColorOrangeJacket MarkingFeet

Composite Fiber Count 12 + 12

Total Fiber Count 24

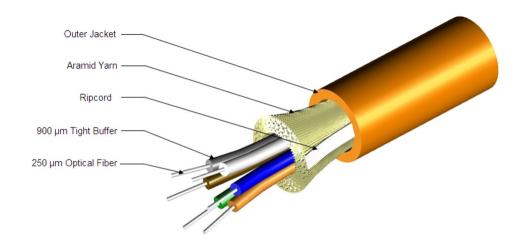
Dimensions

Diameter Over Jacket 7.9 mm | 0.311 in

Representative Image



760026393 | R-024-DS-CM-FSUOR/8W012/6F012



Mechanical Specifications

Minimum Bend Radius, loaded 118 mm | 4.646 in Minimum Bend Radius, unloaded 79 mm | 3.11 in Tensile Load, long term, maximum 400 N | 89.924 lbf

Tensile Load, short term, maximum 1335 N | 300.12 lbf

10 N/mm | 57.101 lb/in Compression FOTP-41 | IEC 60794-1 E3 **Compression Test Method**

Flex 100 cycles

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

Impact 2.94 N-m | 26.021 in lb

FOTP-25 | IEC 60794-1 E4 Impact Test Method

See long and short term tensile loads

Twist 10 cycles

Twist Test Method FOTP-85 | IEC 60794-1 E7

Vertical Rise, maximum 500 m | 1,640.42 ft

Optical Specifications

Strain

Strain Test Method

Fiber Type Composite MM/SM | G.652.D and G.657.A1, TeraSPEED® | OM1, OptiSPEED®

FOTP-33 | IEC 60794-1 E1

Environmental Specifications



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

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

Cable Qualification Standards ANSI/ICEA S-83-596 | Telcordia GR-409

Environmental Space Riser

Flame Test Listing NEC OFNR (ETL) and c(ETL)

Flame Test Method UL 1666

Environmental Test Specifications

Heat Age $-20 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-4 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$

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 °C to +70 °C (-4 °F to +158 °F)

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

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-6F-TB - OptiSPEED® OM1 Multimode

Fiber

CS-8W-TB - TeraSPEED® Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



OptiSPEED® OM1 Multimode Fiber

Optical fiber

OptiSPEED®

Product Classification

Portfolio CommScope®

General Specifications

Product Type

Cladding Non-Circularity, maximum 1 %

Coating Diameter (Colored) 254 µm

Coating Diameter (Uncolored) 245 µm

Coating Diameter Tolerance (Colored) ±7 μm

Coating Diameter Tolerance (Uncolored) ±10 μm

Coating/Cladding Concentricity Error, maximum 12 µm

Core Diameter 62.5 µm

Core Diameter Tolerance ±2.5 µm

Core/Clad Offset, maximum 1 µm

Proof Test 689.476 N/mm² | 100000 psi

Tight Buffer Diameter 900 μm Tight Buffer Diameter Tolerance $\pm 40 \ \mu m$

Mechanical Specifications

Macrobending, 75 mm Ø mandrel, 100 turns 0.50 dB @ 1,300 nm | 0.50 dB @ 850 nm

Coating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 18

COMMSCOPE®

CS-6F-TB

Optical Specifications

Numerical Aperture0.275Numerical Aperture Tolerance±0.015Point Defects, maximum0.15 dB

Zero Dispersion Slope, maximum 0.097 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum 1365 nm **Zero Dispersion Wavelength, minimum** 1320 nm

Optical Specifications, Wavelength Specific

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

Attenuation, maximum 1.00 dB/km @ 1,300 nm | 3.00 dB/km @ 850 nm

Backscatter Coefficient -68.0 dB @ 850 nm | -75.7 dB @ 1,300 nm

Bandwidth, OFL, minimum 220 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm

Index of Refraction 1.491 @ 1,300 nm | 1.496 @ 850 nm

Standards Compliance TIA-492AAAA (OM1)

Environmental Specifications

Heat Aging, maximum 0.20 dB/km @ $85 \,^{\circ}$ C

Temperature Dependence, maximum0.1 dB/kmTemperature Humidity Cycling, maximum0.2 dB/km

Water Immersion, maximum 0.20 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



TeraSPEED® Singlemode Fiber

TeraSPEED®

Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Diameter 125 µm **Cladding Diameter Tolerance** $\pm 0.7 \, \mu m$ Cladding Non-Circularity, maximum 0.7 % **Coating Diameter (Colored)** $249 \, \mu m$ **Coating Diameter (Uncolored)** $242 \, \mu m$ **Coating Diameter Tolerance (Colored)** ±13 µm **Coating Diameter Tolerance (Uncolored)** ±5 µm Coating/Cladding Concentricity Error, maximum 12 µm **Core Diameter** 8.3 µm Core/Clad Offset, maximum $0.5 \, \mu m$

Proof Test 100000 psi | 689.476 N/mm²

Tight Buffer Diameter 900 μm Tight Buffer Diameter Tolerance $\pm 40 \ \mu m$

Dimensions

Fiber Curl, minimum 4 m | 13.123 ft

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

COMMSCOPE®

CS-8W-TB

Macrobending, 60 mm Ø mandrel, 100 turns0.05 dB @ 1,550 nm | 0.05 dB @ 1,625 nm

Coating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

Cabled Cutoff Wavelength, maximum1260 nmPoint Defects, maximum0.1 dB

Zero Dispersion Slope, maximum 0.092 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 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 | 0.50 dB/km @ 1,575 nm | 0.70 dB/km @ 1,270

nm

Backscatter Coefficient -79.6 dB @ 1,310 nm | -82.1 dB @ 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 10.4 μm @ 1,550 nm | 9.2 μm @ 1,310 nm | 9.6 μm @

1,385 nm

Mode Field Diameter Tolerance ±0.4 μm @ 1310 nm | ±0.5 μm @ 1550 nm | ±0.6 μm

@ 1385 nm

Polarization Mode Dispersion Link Design Value, maximum 0.04 ps/sqrt(km)

Standards Compliance | ITU-T G.652.D | ITU-T G.657.A1 | TIA-492CAAB (OS1a)

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



CS-8W-TB

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

