700010036 | N-001-SP-6F-F290R



Fiber indoor cable, OptiSPEED® 2.9 mm Low Smoke Zero Halogen Riser Simplex, 1 fiber, Multimode OM1, Feet jacket marking, Orange jacket color

Product Classification

Regional Availability	Asia Australia/New Zealand EMEA Latin America North America
Portfolio	CommScope®
Product Type	Fiber indoor cable
Product Series	N-SP
General Specifications	
Cable Type	Cordage
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Color	Orange
Jacket Marking	Feet
Total Fiber Count	1
Dimensions	
Diameter Over Jacket	2.9 mm 0.114 in

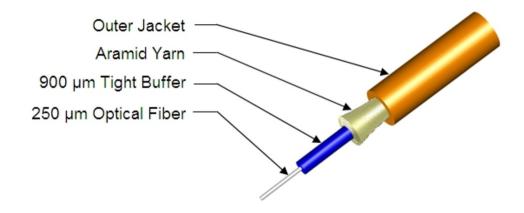
Representative Image

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Mechanical Specifications

Minimum Bend Radius, loaded	44 mm 1.732 in
Minimum Bend Radius, unloaded	23 mm 0.906 in
Tensile Load, long term, maximum	80 N 17.985 lbf
Tensile Load, short term, maximum	267 N 60.024 lbf
Compression	10 N/mm 57.101 lb/in
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	300 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	0.74 N-m 6.55 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
Vertical Rise, maximum	500 m 1,640.42 ft
Optical Specifications	

Fiber Type

OM1, OptiSPEED® | OM1, OptiSPEED®

Environmental Specifications

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Installation temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Operating Temperature	-20 °C to +70 °C (-4 °F to +158 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Cable Qualification Standards	ANSI/ICEA S-83-596 Telcordia GR-409
Environmental Space	Low Smoke Zero Halogen (LSZH) Riser
Flame Test Listing	NEC OFNR-ST1 (ETL) and c(ETL)
Flame Test Method	IEC 60332-3 IEC 60754-2 IEC 61034-2 UL 1666 UL 1685

Environmental Test Specifications

Heat Age	-20 °C to +85 °C (-4 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-20 °C to +70 °C (-4 °F to +158 °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

ISO 9001:2015

9 kg/km | 6.048 lb/kft

Regulatory Compliance/Certifications

Agency

Classification Designed, manufactured and/or distributed under this quality management system

Included Products

CS-6F-TB – OptiSPEED® OM1 Multimode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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OptiSPEED® OM1 Multimode Fiber

OptiSPEED[®]

Product Classification

Portfolio	CommScope®
Product Type	Optical fiber
General Specifications	
Cladding Diameter	125 µm
Cladding Diameter Tolerance	±1.0 μm
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	±40 μm
Mechanical Specifications	

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

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CS-6F-TB

Optical Specifications

Numerical Aperture	0.275
Numerical Aperture Tolerance	±0.015
Point Defects, maximum	0.15 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 °C
Temperature Dependence, maximum	0.1 dB/km
Temperature Humidity Cycling, maximum	0.2 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

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