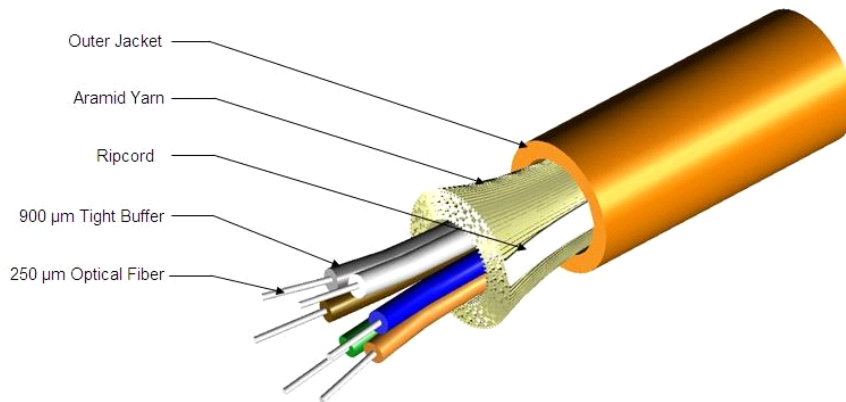


760012112 | R-012-DS-5K-FSUAQ
Riser Distribution Cable, 12 fiber single-unit

Representative Image



General Specifications

Cable Type	Distribution
Construction Type	Non-armored
Subunit Type	Gel-free

Construction Materials

Fiber Type Solution	LazrSPEED® 550, 50 µm multimode fiber (OM4)
Total Fiber Count	12
Fiber Type	LazrSPEED® 550, 50 µm multimode fiber (OM4)
Fiber Type, quantity	12
Jacket Color	Aqua

Dimensions

Cable Weight	22.0 lb/kft 32.0 kg/km
Diameter Over Jacket	5.95 mm 0.23 in

Physical Specifications

Minimum Bend Radius, loaded	8.9 cm 3.5 in
Minimum Bend Radius, unloaded	5.9 cm 2.3 in
Tensile Load, long term, maximum	45 lbf 200 N
Tensile Load, short term, maximum	150 lbf 667 N
Vertical Rise, maximum	500.0 m 1640.4 ft

760012112 | R012-DS-5K-FSUAQ

Flame Test Specifications

Flame Test Listing	NEC OFNR (ETL) and c(ETL)
Flame Test Method	UL 1666

Environmental Specifications

Environmental Space	Riser
Installation Temperature	-20 °C to +70 °C (-4 °F to +158 °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)

Mechanical Test Specifications

Compression	10 N/mm 57 lb/in
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	100 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	4.34 ft lb 5.88 N-m
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

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

Qualification Specifications

Cable Qualification Standards	ANSI/ICEA S-83-596 Telcordia GR-409
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Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system



Included Products

CS-5K-TB (Product Component—not orderable) — LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

* **Footnotes**

Operating Temperature Specification applicable to non-terminated bulk fiber cable

LazrSPEED® 550 CS-5K-TB LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

Optical Specifications, Wavelength Specific

Standards Compliance	IEC 60793-2-10, type A1a.3a IEC 60793-2-10, type A1a.3b TIA-492AAAD (OM4)
Attenuation, maximum	1.00 dB/km @ 1300 nm 3.00 dB/km @ 850 nm
Differential Mode Delay Note	Superior to TIA-492AAAC and IEC 60793-2-10 at 850 nm
Index of Refraction	1.479 @ 1300 nm 1.483 @ 850 nm
1 Gbps Ethernet Distance	600 m @ 1300 nm 1110 m @ 850 nm
10 Gbps Ethernet Distance	550 m @ 850 nm 1804 ft @ 850 nm
Bandwidth, Laser, minimum	500 MHz-km @ 1300 nm 4700 MHz-km @ 850 nm
Bandwidth, OFL, minimum	500 MHz-km @ 1300 nm 3500 MHz-km @ 850 nm
Differential Mode Delay	0.70 ps/m @ 850 nm 0.88 ps/m @ 1300 nm
Backscatter Coefficient	-75.7 dB @ 1300 nm -68.0 dB @ 850 nm

Physical Specifications

Cladding Diameter	125.0 μm
Cladding Diameter Tolerance	$\pm 1.0 \mu\text{m}$
Cladding Non-Circularity, maximum	1.0 %
Coating Diameter (Colored)	254 μm
Coating Diameter (Uncolored)	245 μm
Coating Diameter Tolerance (Colored)	$\pm 7 \mu\text{m}$
Coating Diameter Tolerance (Uncolored)	$\pm 10 \mu\text{m}$
Tight Buffer Diameter	900 μm
Tight Buffer Diameter Tolerance	$\pm 40 \mu\text{m}$
Coating/Cladding Concentricity Error, maximum	6 μm
Core Diameter	50.0 μm
Core Diameter Tolerance	$\pm 2.5 \mu\text{m}$
Core/Clad Offset, maximum	1.5 μm

Optical Specifications, General

Numerical Aperture	0.200
Numerical Aperture Tolerance	± 0.015
Point Defects, maximum	0.15 dB
Zero Dispersion Slope, maximum	0.105 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1316 nm
Zero Dispersion Wavelength, minimum	1297 nm

Mechanical Specifications

Coating Strip Force, maximum	8.9 N 2.0 lbf
Coating Strip Force, minimum	1.3 N 0.3 lbf
Dynamic Fatigue Parameter, minimum	18
Macrobending, 15 mm mandrel, 2 turns	0.20 dB @ 850 nm 0.50 dB @ 1300 nm
Macrobending, 30 mm mandrel, 2 turns	0.10 dB @ 850 nm 0.30 dB @ 1300 nm
Macrobending, 75 mm mandrel, 100 turns	0.50 dB @ 850 nm 0.50 dB @ 1300 nm
Proof Test	0.69 N/mm ² 100.00 psi

Environmental Specifications

Heat Aging, maximum	0.20 dB @ 85 °C
Temperature Dependence, maximum	0.10 dB
Temperature Humidity Cycling, maximum	0.20 dB
Water Immersion, maximum	0.20 dB @ 23 °C

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2008	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