

760255144 | Z-3456-LZ-RR-F12BK/8G1/99L/200

Fiber Indoor/Outdoor cable, Interlocking Armored, LSZH, Gel-Free, 3456 fiber, Singlemode G.657. A2, Rollable Ribbon with 200um Fibers, Feet jacket marking, Black jacket color

Product Classification

Regional Availability	Asia Australia/New Zealand EMEA Latin America North America
Portfolio	CommScope®
Product Type	Fiber indoor/outdoor cable
Product Series	Z-LZ

General Specifications

Cable Type	Ribbon loose tube
Construction Type	Armored Rollable ribbon
Subunit Type	Gel-free
Fibers per Ribbon, quantity	12
Jacket Color	Black
Jacket Marking	Feet
Fibers per Subunit, quantity	576
Total Fiber Count	3456

Dimensions

Buffer Tube/Subunit Diameter	7.5 mm 0.295 in
Diameter Over Armor	33.7 mm 1.327 in
Diameter Over Jacket	35.7 mm 1.406 in

Mechanical Specifications

Minimum Bend Radius, loaded	536 mm 21.102 in
Minimum Bend Radius, storage coils	536 mm 21.102 in
Minimum Bend Radius, unloaded	357 mm 14.055 in
Tensile Load, long term, maximum	800 N 179.847 lbf
Tensile Load, short term, maximum	2670 N 600.24 lbf
Compression	22 N/mm 125.623 lb/in
Compression Test Method	FOTP-41 IEC 60794-1 E3

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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	G.657.A2 G.657.A2, TeraSPEED®
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Environmental Specifications

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 +70 °C (-40 °F to +158 °F)
Cable Qualification Standards	ANSI/ICEA S-104-696 Telcordia GR-20-CORE Issue 4
Environmental Space	Low Smoke Zero Halogen (LSZH)
Flame Test Listing	NEC OFCR-ST1 (ETL) and c(ETL)
Flame Test Method	CSA FT4 UL 1666 UL 1685
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Test Method	FOTP-82 IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze	-2 °C 28.4 °F
Cable Freeze Test Method	FOTP-98 IEC 60794-1 F15
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

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Packaging and Weights

Cable weight 1143 kg/km | 768.061 lb/kft

Regulatory Compliance/Certifications

Agency	Classification
ANATEL	Compliant



Included Products

CS-8G1-RR-I/O – Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Rollable Ribbon Fiber (ITU-T G.657.A2, B2)

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-8G1-RR-I/O

Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Rollable Ribbon Fiber (ITU-T G.657.A2, B2)

Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±0.3 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 Test	689.476 N/mm ² 100000 psi

Dimensions

Fiber Curl, minimum	4 m 13.123 ft
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Mechanical Specifications

Macrobending, 15 mm Ø mandrel, 1 turn	0.50 dB @ 1,550 nm 1.00 dB @ 1,625 nm
Macrobending, 20 mm Ø mandrel, 1 turn	0.10 dB @ 1,550 nm 0.20 dB @ 1,625 nm
Macrobending, 30 mm Ø mandrel, 10 turns	0.03 dB @ 1,550 nm 0.10 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
Point Defects, maximum	0.1 dB

CS-8G1-RR-I/O

Zero Dispersion Slope, maximum	0.092 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	1302 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum	0.3 dB/km @ 1,550 nm 0.4 dB/km @ 1,310 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	$\pm 0.4 \mu\text{m}$ @ 1310 nm $\pm 0.5 \mu\text{m}$ @ 1550 nm
Polarization Mode Dispersion Link Design Value, maximum	0.06 ps/sqrt(km)
Standards Compliance	ITU-T G.657.A2 ITU-T G.657.B2

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