810010539/DB | C-096-LA-8W-M12BK/25D/B



Fiber indoor/outdoor cable, Single Jacket/Single Armor, Low Smoke Zero Halogen (LSZH), 96 fiber, Singlemode G.652.D and G.657.A1, Gel-Free, Stranded Loose Tube, Black jacket color, Meter jacket marking, B2ca flame rating

• Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

Product Classification

Regional Availability	Asia Australia/New Zealand EMEA Europe Latin America North America
Portfolio	CommScope®
Product Type	Fiber indoor/outdoor cable
Product Series	Z-LA
General Specifications	
Armor Type	Corrugated steel
Cable Type	Stranded loose tube
Construction Type	Armored
Subunit Type	Gel-free
Jacket Color	Black
Jacket Marking	Feet
Subunit, quantity	8
Fibers per Subunit, quantity	12
Total Fiber Count	96
Dimensions	
Buffer Tube/Subunit Diameter	2.5 mm 0.098 in
Diameter Over Jacket	15 mm 0.591 in

Representative Image

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810010539/DB | C-096-LA-8W-M12BK/25D/B



Mechanical Specifications

Minimum Bend Radius, loaded	201 mm 7.913 in
Minimum Bend Radius, unloaded	134 mm 5.276 in
Tensile Load, long term, maximum	800 N 179.847 lbf
Tensile Load, short term, maximum	2700 N 606.984 lbf
Compression	44 N/mm 251.246 lb/in
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	3 N-m 26.552 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	428 m 1,404.2 ft
Optical Specifications	

Fiber Type

G.652.D and G.657.A1

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)

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810010539/DB | C-096-LA-8W-M12BK/25D/B

Storage Temperature	-40 °C to +75 °C (-40 °F to +167 °F)
Cable Qualification Standards	ANSI/ICEA S-104-696 EN 187105 Telcordia GR-20 Telcordia GR- 409
EN50575 CPR Cable EuroClass Fire Performance	B2ca
EN50575 CPR Cable EuroClass Smoke Rating	s1b
EN50575 CPR Cable EuroClass Droplets Rating	d0
EN50575 CPR Cable EuroClass Acidity Rating	a1
Environmental Space	Aerial, lashed Buried Low Smoke Zero Halogen (LSZH)
Flame Test Listing	EN 50399 NEC OFC-ST1 (ETL) and c(ETL)
Flame Test Method	EN 50399 IEC 60332-3 IEC 60754-2 IEC 61034-2 IEEE 1202 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
Packaging and Weights	
Cable weight	237 kg/km 159.257 lb/kft
CS-8W-200-EMEA – Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode	
8W-200-EMEA Fiber	

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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CS-8W-200-EMEA | 8W-200um

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)	200 µm
Coating Diameter (Uncolored)	190 µm
Coating Diameter Tolerance (Colored)	±10 μm
Coating Diameter Tolerance (Uncolored)	±10 μm
Coating/Cladding Concentricity Error, maximum	12 µm
Core/Clad Offset, maximum	0.5 µm
Proof Tensile Stress	100,000 psi (0.69 GPa)
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
Macrobending, 50 mm Ø mandrel, 100 turns	0.05 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	
Optical Specifications Cabled Cutoff Wavelength, maximum	1250 nm
	1250 nm 0.05 dB

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COMMSCOPE°

CS-8W-200-EMEA | 8W-200um

Zero Dispersion Wavelength, maximum	1324 nm	
Zero Dispersion Wavelength, minimum	1300 nm	
Optical Specifications, Wavelength Specific		
Attenuation, maximum	0.20 dB/km @ 1550 nm 0.23 dB/km @ 1,625 nm 0.344 dB/km @ 1310 nm 0.344 dB/km @ 1380 - 1385 nm	
Dispersion, maximum	18 ps(nm-km) at 1550 nm 22 ps(nm-km) at 1625 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	
Mode Field Diameter Tolerance	±0.4 μm @ 1310 nm ±0.5 μm @ 1550 nm	
Polarization Mode Dispersion Link Design Value, maximum	0.05 ps/sqrt(km)	
Standards Compliance	ITU-T G.652.D 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

* 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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