

810009757/DB | C-024-RD-8F-M24BK-08D/D



Fiber indoor/outdoor Retractable Façade Distribution Cable, 24 fibers, Singlemode, G.657.A1, Gel-free, Meters jacket marking, Black jacket color

Product Classification

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

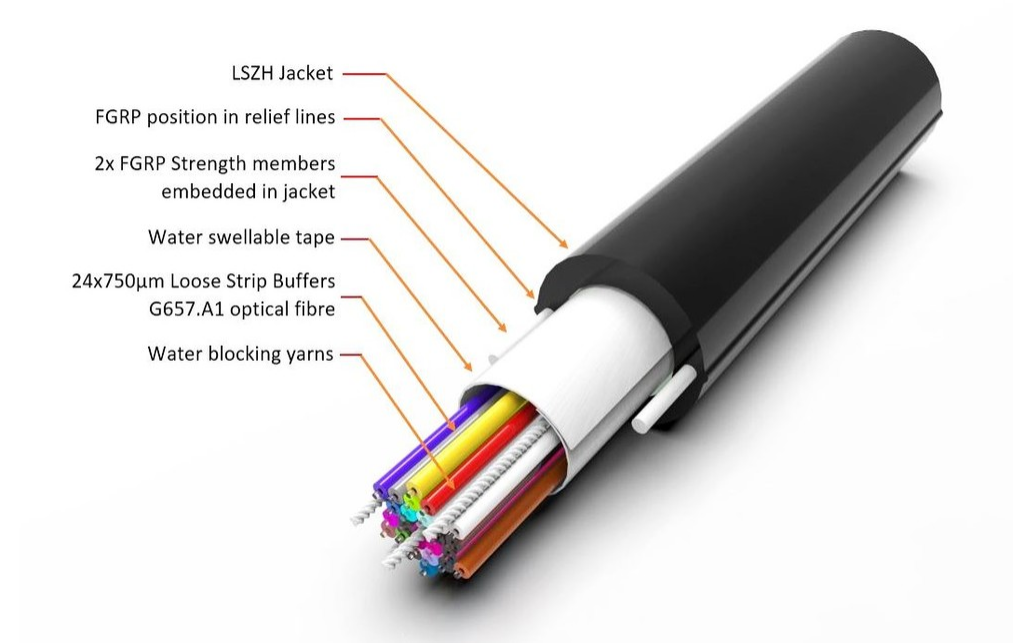
General Specifications

Cable Type	Distribution Loose tube
Construction Type	Non-armored
Subunit Type	Gel-free
Filler, quantity	4
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMScope GB F.O. CABLE 810009757/DB 24x9 /125 G657A1 ULSZH (serial number) (metre mark)
Subunit, quantity	24
Fibers per Subunit, quantity	1
Total Fiber Count	24

Dimensions

Cable Length	1000 m 3,280.84 ft
Buffer Tube/Subunit Diameter	0.75 mm 0.03 in
Diameter Over Jacket	9.2 mm 0.362 in

Representative Image



Material Specifications

Jacket Material

Low Smoke Zero Halogen (LSZH)

Mechanical Specifications

Minimum Bend Radius, loaded	50 mm 1.969 in
Minimum Bend Radius, unloaded	55 mm 2.165 in
Tensile Load, long term, maximum	100 N 22.481 lbf
Tensile Load, short term, maximum	250 N 56.202 lbf
Compression	5 N/mm 28.551 lb/in
Compression Test Method	IEC 60794-1-21 E3
Flex	25 cycles
Flex Test Method	IEC 60794-1 E6
Impact	5 N-m 44.254 in lb
Impact Test Method	IEC 60794-1-21 E4
Strain	See long and short term tensile loads
Strain Test Method	IEC 60794-1-21 E1
Twist	10 cycles
Twist Test Method	IEC 60794-1-21 E7

Vertical Rise, maximum492 m | 1,614.173 ft

Optical Specifications

Fiber TypeG.657.A1

Environmental Specifications

Installation temperature-20 °C to +70 °C (-4 °F to +158 °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 StandardsIEC 60794-1-2

EN50575 CPR Cable EuroClass Fire PerformanceDca

EN50575 CPR Cable EuroClass Smoke Ratings2

EN50575 CPR Cable EuroClass Droplets Ratingd2

EN50575 CPR Cable EuroClass Acidity Ratinga2

Environmental SpaceFacade | Outdoor

Flame Test MethodIEC 60332-1-2

Jacket UV ResistanceUV stabilized

Water Penetration24 h

Water Penetration Test MethodIEC 60794-1 F4

Environmental Test Specifications

Cable Freeze-2 °C | 28.4 °F

Cable Freeze Test MethodIEC 60794-1 F15

Drip70 °C | 158 °F

Drip Test MethodIEC 60794-1-21 E14

Heat Age Test MethodIEC 60794-1-22 F9

Low High Bend-30 °C to +60 °C (-22 °F to +140 °F)

Low High Bend Test MethodIEC 60794-1-21 E11

Temperature Cycle-30 °C to +70 °C (-22 °F to +158 °F)

Temperature Cycle Test MethodIEC 60794-1-22 F1

Packaging and Weights

Cable weight46 kg/km | 30.911 lb/kft

Included Products

- CS-8F-TB
- Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-8F-TB

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)	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 Tensile Stress	100,000 psi (0.69 GPa)
Tight Buffer Diameter	900 µm
Tight Buffer Diameter Tolerance	±40 µm

Dimensions

Fiber Curl, minimum	4 m 13.123 ft
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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	0.03 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

Cabled Cutoff Wavelength, maximum	1260 nm
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CS-8F-TB

Point Defects, maximum	0.1 dB
Zero Dispersion Slope, maximum	0.09 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	1300 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
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	±0.4 μm @ 1310 nm ±0.5 μm @ 1550 nm
Polarization Mode Dispersion Link Design Value, maximum	0.06 ps/sqrt(km)
Standards Compliance	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

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