

Fiber indoor/outdoor Retractable Façade Distribution Cable, 24 fibers, Singlemode, G.657.Al, 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 760248049 24x9/125 G657A1 ULSZH (serial

number) (metre mark)

Subunit, quantity 24

Fibers per Subunit, quantity

Total Fiber Count 24

Dimensions

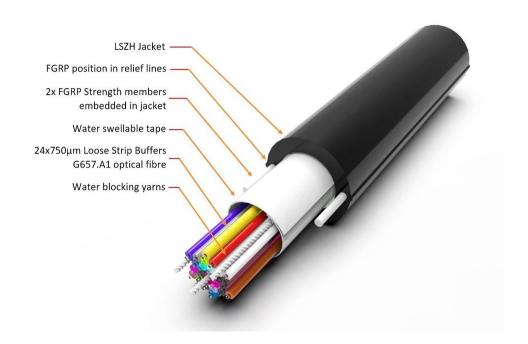
Cable Length 1000 m | 3,280.84 ft

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, loaded50 mm1.969 inMinimum Bend Radius, unloaded55 mm2.165 inTensile Load, long term, maximum100 N22.481 lbfTensile Load, short term, maximum250 N56.202 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

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Vertical Rise, maximum 492 m | 1,614.173 ft

Optical Specifications

Fiber Type G.657.A1

Environmental Specifications

Installation temperature $-20 \,^{\circ}\text{C to} + 70 \,^{\circ}\text{C } (-4 \,^{\circ}\text{F to} + 158 \,^{\circ}\text{F})$ Operating Temperature $-40 \,^{\circ}\text{C to} + 70 \,^{\circ}\text{C } (-40 \,^{\circ}\text{F to} + 158 \,^{\circ}\text{F})$

Storage Temperature $-40 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$

Cable Qualification Standards IEC 60794-1-2

EN50575 CPR Cable EuroClass Fire PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings2EN50575 CPR Cable EuroClass Droplets Ratingd2EN50575 CPR Cable EuroClass Acidity Ratinga2

Environmental Space Facade | Outdoor

Flame Test Method | IEC 60332-1-2 | IEC 60754-2 | IEC 61034-2

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration Test Method IEC 60794-1 F4

Environmental Test Specifications

Cable Freeze -2 °C | 28.4 °F

Cable Freeze Test Method IEC 60794-1 F15

Drip 70 °C | 158 °F

Drip Test Method IEC 60794-1-21 E14

Heat Age Test Method IEC 60794-1-22 F9

Low High Bend $-30 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \, (-22 \,^{\circ}\text{F to } +140 \,^{\circ}\text{F})$

Low High Bend Test Method IEC 60794-1-21 E11

Temperature Cycle $-30 \,^{\circ}\text{C}$ to $+70 \,^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to $+158 \,^{\circ}\text{F}$)

Temperature Cycle Test Method IEC 60794-1-22 F1

Packaging and Weights

Cable weight 46 kg/km | 30.911 lb/kft



Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

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** $\pm 0.7 \, \mu m$ 0.7 % **Cladding Non-Circularity, maximum Coating Diameter (Colored)** 249 um **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 $0.5 \, \mu m$

Proof Test 689.476 N/mm² | 100000 psi

Tight Buffer Diameter900 μmTight Buffer Diameter Tolerance±40 μm

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
 0.03 dB @ 1,550 nm
 | 0.05 dB @ 1,625 nm

Coating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

Cabled Cutoff Wavelength, maximum 1260 nm

COMMSCOPE®

CS-8F-TB

Point Defects, maximum 0.1 dB

Zero Dispersion Slope, maximum 0.09 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 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

0.06 ps/sgrt(km)

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 $\pm 0.4 \, \mu m$ @ 1310 nm $\pm 0.5 \, \mu m$ @ 1550 nm

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

Polarization Mode Dispersion Link Design Value, maximum

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

* Fnotnotes

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

COMMSC PE®