

Fiber indoor/outdoor cable, TeraSPEED®, Single Jacket/Single Armor, Low Smoke Zero Halogen (LSZH), 12 fiber, Singlemode G.657.A2, Gel Filled, Stranded Loose Tube, Meters jacket marking, Black jacket color, B2ca flame rating

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

Product Classification

Regional Availability EMEA

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series C-LA

General Specifications

 Armor Type
 Corrugated steel

 Cable Type
 Stranded loose tube

 Construction Type
 Armored

 Subunit Type
 Gel-filled

 Jacket Color
 Black

 Jacket Marking
 Meters

 Jacket Marking Method
 Inkjet

Jacket Marking Text COMMSCOPE GB OPTICAL CABLE G657A2 SM 12 FIBER EN50575 CLASS

B [SERIAL NUMBER] [MM/YY] [METRE MARK]

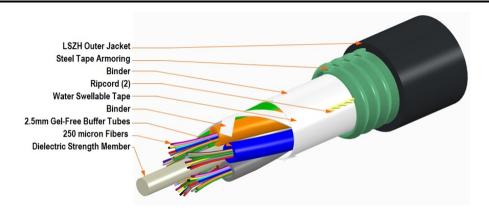
Subunit, quantity 6
Fibers per Subunit, quantity 12
Total Fiber Count 12

Dimensions

Buffer Tube/Subunit Diameter2 mm | 0.079 inDiameter Over Jacket12.3 mm | 0.484 in

Representative Image





Mechanical Specifications

Minimum Bend Radius, loaded200 mm7.874 inMinimum Bend Radius, unloaded133 mm5.236 inTensile Load, long term, maximum800 N179.847 lbf

Tensile Load, short term, maximum 2700 N | 606.984 lbf

Compression 44 N/mm | 251.246 lb/in

Compression Test Method IEC 60794-1 E3

Flex 25 cycles

Flex Test Method IEC 60794-1 E6

Impact 10 N-m | 88.507 in lb

Impact Test Method 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 IEC 60794-1 E7

Vertical Rise, maximum 432 m | 1,417.323 ft

Optical Specifications

Fiber Type G.657.A2 | G.657.A2

Environmental Specifications

Installation temperature $-30 \,^{\circ}\text{C to} +60 \,^{\circ}\text{C (-22 °F to} +140 \,^{\circ}\text{F)}$ Operating Temperature $-40 \,^{\circ}\text{C to} +70 \,^{\circ}\text{C (-40 °F to} +158 \,^{\circ}\text{F)}$

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Storage Temperature -40 °C to +75 °C (-40 °F to +167 °F)

Cable Qualification StandardsEN 187105I EC 60794-1-2

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd0EN50575 CPR Cable EuroClass Acidity Ratinga1

Environmental Space Aerial, lashed | Buried | Low Smoke Zero Halogen (LSZH)

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 F5

Environmental Test Specifications

Cable Freeze-2 °C | 28.4 °FCable Freeze Test MethodIEC 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 $-30 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to $+140 \,^{\circ}\text{F}$)

Low High Bend Test Method IEC 60794-1 E11

Temperature Cycle -40 °C to +70 °C (-40 °F to +158 °F)

Temperature Cycle Test Method IEC 60794-1 F1

Packaging and Weights

Cable weight 199.4 kg/km | 133.991 lb/kft

Regulatory Compliance/Certifications

Agency	Classification
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant





Included Products

CS-8G-LT

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

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



CS-8G-LT

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

Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Diameter 125 µm ±0.7 µm **Cladding Diameter Tolerance** 0.7 % Cladding Non-Circularity, maximum 249 µm **Coating Diameter (Colored) 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)

Dimensions

Fiber Curl, minimum 4 m | 13.123 ft

Mechanical Specifications

 Macrobending, 15 mm Ø mandrel, 1 turn
 0.50 dB @ 1,550 nm
 1 1.00 dB @ 1,625 nm

 Macrobending, 20 mm Ø mandrel, 1 turn
 0.10 dB @ 1,550 nm
 1 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, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

Cabled Cutoff Wavelength, maximum1260 nmPoint Defects, maximum0.1 dB

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CS-8G-LT

Zero Dispersion Slope, maximum 0.092 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1302 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.25 dB/km @ 1,550 nm | 0.33 dB/km @ 1,385

nm | 0.36 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

 $\textbf{Mode Field Diameter} \hspace{1.5cm} 8.6~\mu m \ @ \ 1,310~nm \quad | \ \ 9.8~\mu m \ @ \ 1,550~nm$

Mode Field Diameter Tolerance $\pm 0.4 \, \mu \text{m} \ @ \ 1310 \, \text{nm} \quad | \quad \pm 0.5 \, \mu \text{m} \ @ \ 1550 \, \text{nm}$

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

