810010403/DB | C-006-DN-8G-M06BK/15G/D

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Fiber indoor/outdoor cable, LightScope® ZWP Gel-filled loose tube, 6 fiber, Singlemode, Meters jacket marking, Black jacket color, Dca flame rating

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series C-DN

General Specifications

Cable Type Central loose tube

Construction Type Non-armored

Subunit Type Gel-filled

Jacket Color Black

Jacket Marking Meters

Jacket Marking Method Inkjet

Subunit, quantity 1

Total Fiber Count 6

Dimensions

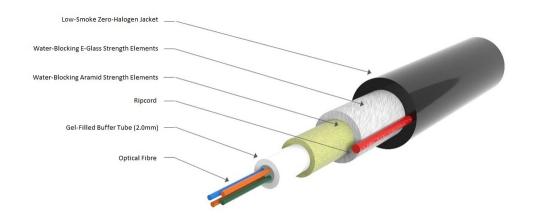
Fibers per Subunit, quantity

Buffer Tube/Subunit Diameter1.5 mm0.059 inDiameter Over Jacket4.6 mm0.181 in

Representative Image



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Mechanical Specifications

Minimum Bend Radius, loaded 25 mm | 0.984 in

Minimum Bend Radius, unloaded 25 mm | 0.984 in

Tensile Load, long term, maximum 600 N | 134.885 lbf

Tensile Load, short term, maximum 1500 N | 337.214 lbf

Cable Crush Resistance, maximum 15 N/mm | 85.652 lb/in

Compression Test Method IEC 60794-1-2 E3

Impact 10 N-m | 88.507 in lb

Impact Test Method IEC 60794-1 E4

Twist 100 cycles

Twist Test Method IEC 60794-1 E7

Optical Specifications

Fiber Type G.652.D and G.657.A1

Environmental Specifications

Installation temperature $-10 \,^{\circ}\text{C}$ to $+50 \,^{\circ}\text{C}$ (+14 $^{\circ}\text{F}$ to +122 $^{\circ}\text{F}$)

Operating Temperature $-30 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \, (-22 \,^{\circ}\text{F to } +140 \,^{\circ}\text{F})$

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

Cable Qualification Standards IEC 60794-1-2

EN50575 CPR Cable EuroClass Fire PerformanceDca **EN50575 CPR Cable EuroClass Smoke Rating**s1a

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EN50575 CPR Cable EuroClass Droplets Rating d0

EN50575 CPR Cable EuroClass Acidity Rating a1

Environmental Space Drop | Universal Low Smoke Zero Halogen (ULSZH)

Flame Test Listing IEC 60332-1-2

Flame Test Method EN 50399 | IEC 60754-2 | IEC 61034-2

Water Penetration 24 h

Environmental Test Specifications

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

Temperature Cycle Test Method IEC 60794-1-2 F1

Packaging and Weights

Cable weight 30 kg/km | 20.159 lb/kft

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

COMMSCOPE®

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

 $\textbf{Mode Field Diameter} \hspace{1.5cm} 8.6~\mu m \ @ 1,310~nm \hspace{0.2cm} | \hspace{0.2cm} 9.8~\mu m \ @ 1,550~nm$

Mode Field Diameter Tolerance $\pm 0.4 \ \mu m$ @ 1310 nm | $\pm 0.5 \ \mu m$ @ 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

