810010166/DB | C-004-DN-8F-M04BK/20G-P001



Fiber indoor/outdoor cable, LightScope® ZWP Gel-filled loose tube, 4 fiber, Singlemode G.657.A1, 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

Jacket Marking Text OPTICAL CABLE COMMSCOPE ADSS-NOTKtcdD 4J7A1 (1x4)OF 1,5kN

(Serial Number) MM/YYYY 1234 M

Subunit, quantity 1

Fibers per Subunit, quantity 4

Total Fiber Count 4

Dimensions

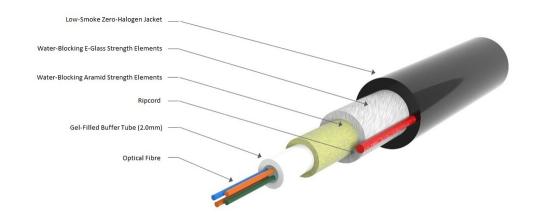
Buffer Tube/Subunit Diameter 2 mm | 0.079 in

Diameter Over Jacket 5.05 mm | 0.199 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 400 N | 89.924 lbf

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

Cable Crush Resistance, maximum15 N/mm | 85.652 lb/in

Compression 15 N/mm | 85.652 lb/in

Compression Test Method IEC 60794-1-2 E3

Impact 3 N-m | 26.552 in lb

Impact Test Method IEC 60794-1 E4

Twist 5 cycles

Twist Test Method IEC 60794-1 E7

Optical Specifications

Fiber Type G.657.A1

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.35 dB/km @ 1,300 nm

Environmental Specifications

Installation temperature $-10 \,^{\circ}\text{C}$ to $+70 \,^{\circ}\text{C}$ (+14 $^{\circ}\text{F}$ 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 $-40 \,^{\circ}\text{C}$ to $+70 \,^{\circ}\text{C}$ (-40 $^{\circ}\text{F}$ to +158 $^{\circ}\text{F}$)

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Cable Qualification Standards IEC 60794-1-2

EN50575 CPR Cable EuroClass Fire PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd0EN50575 CPR Cable EuroClass Acidity Ratinga1

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

Temperature Cycle Test Method IEC 60794-1-2 F1

Packaging and Weights

Cable weight 34 kg/km | 22.847 lb/kft

Included Products

CS-8F-250-EMEA – LightScope® ZWP Singlemode Fiber 8F-250um

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



CS-8F-250-EMEA | 8F-250um

LightScope® ZWP 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)** ±7 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, 60 mm Ø mandrel, 100 turns
 0.05 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



CS-8F-250-EMEA | 8F-250um

Cabled Cutoff Wavelength, maximum1250 nmPoint Defects, maximum0.05 dB

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

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.20 dB/km @ 1,550 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 | 1.468 @ 1,550 nm

Mode Field Diameter $10.4 \, \mu \text{m} \ @ \ 1,550 \, \text{nm} \ | \ 9.2 \, \mu \text{m} \ @ \ 1,310 \, \text{nm}$

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

