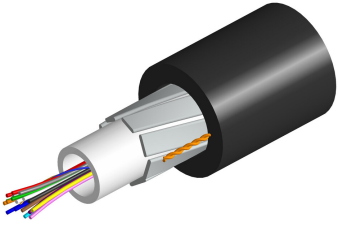


# 810010465/DB | O-004-CN-8F-M04BK/28G/HD



Fiber OSP cable, Single Jacket All-Dielectric, 8 fiber Gel-Filled, Outdoor Central Tube, Singlemode G.657.A1, Meters jacket marking, Black jacket color

## Product Classification

<b>Regional Availability</b>	Asia   Australia/New Zealand   EMEA   Latin America   North America
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber OSP cable
<b>Product Series</b>	O-CN

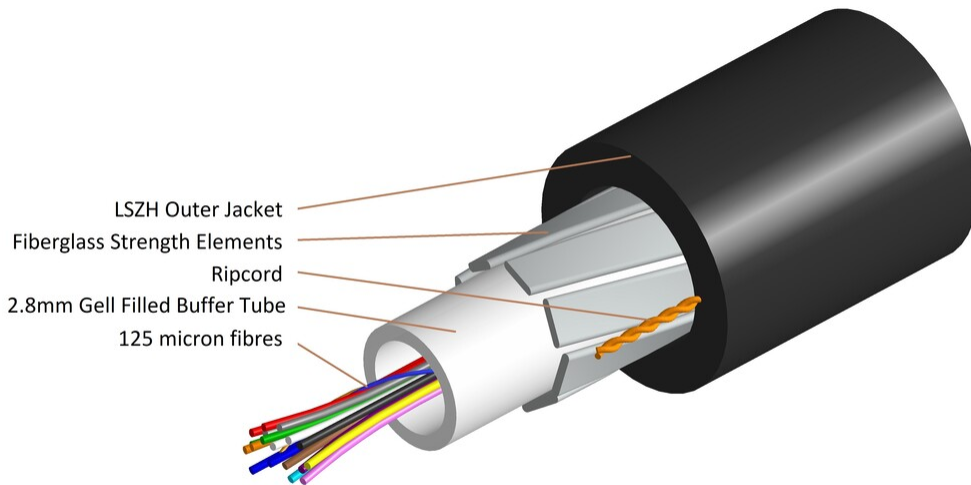
## General Specifications

<b>Cable Type</b>	Central loose tube
<b>Construction Type</b>	Non-armored
<b>Subunit Type</b>	Gel-filled
<b>Jacket Color</b>	Black
<b>Jacket Marking</b>	Meters
<b>Jacket Marking Method</b>	Inkjet
<b>Jacket Marking Text</b>	COMMSCOPE GB F.O. CABLE 810009999/DB 8 x 9 /125 G857A1 HDPE (serial number) (metre mark)
<b>Subunit, quantity</b>	1
<b>Fibers per Subunit, quantity</b>	4
<b>Total Fiber Count</b>	4

## Dimensions

<b>Buffer Tube/Subunit Diameter</b>	2.8 mm   0.11 in
<b>Diameter Over Jacket</b>	5.3 mm   0.209 in

## Representative Image



## Material Specifications

**Jacket Material** High density polyethylene (HDPE)

## Mechanical Specifications

<b>Minimum Bend Radius, loaded</b>	80 mm   3.15 in
<b>Minimum Bend Radius, unloaded</b>	50 mm   1.969 in
<b>Tensile Load, long term, maximum</b>	400 N   89.924 lbf
<b>Tensile Load, short term, maximum</b>	1200 N   269.771 lbf
<b>Compression</b>	15 N/mm   85.652 lb/in
<b>Compression Test Method</b>	IEC 60794-1-2 E3
<b>Flex</b>	25 cycles
<b>Flex Test Method</b>	IEC 60794-1 E6
<b>Impact</b>	5 N-m   44.254 in lb
<b>Impact Test Method</b>	IEC 60794-1 E4
<b>Strain</b>	See long and short term tensile loads
<b>Strain Test Method</b>	IEC 60794-1-2-E1
<b>Twist</b>	5 cycles
<b>Twist Test Method</b>	IEC 60794-1 E7

## Optical Specifications

**Fiber Type** G.657.A1

## Environmental Specifications

**Installation temperature** -30 °C to +70 °C (-22 °F to +158 °F)  
**Operating Temperature** -30 °C to +70 °C (-22 °F to +158 °F)  
**Storage Temperature** -40 °C to +75 °C (-40 °F to +167 °F)  
**Cable Qualification Standards** ANSI/ICEA S-87-640 | EN 187105  
**Environmental Space** Aerial, lashed | Buried  
**Jacket UV Resistance** UV stabilized  
**Water Penetration** 24 h

## Environmental Test Specifications

**Heat Age** -40 °C to +85 °C (-40 °F to +185 °F)  
**Heat Age Test Method** IEC 60794-1 F9  
**Low High Bend** -30 °C to +60 °C (-22 °F to +140 °F)  
**Low High Bend Test Method** FOTP-37 | 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** 27 kg/km | 18.143 lb/kft

## Included Products

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

## \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

# CS-8F-250-EMEA

## LightScope ZWP® Singlemode Fiber



### Product Classification

<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Optical fiber

### General Specifications

<b>Cladding Diameter</b>	125 µm
<b>Cladding Diameter Tolerance</b>	±0.7 µm
<b>Cladding Non-Circularity, maximum</b>	0.7 %
<b>Coating Diameter (Colored)</b>	249 µm
<b>Coating Diameter (Uncolored)</b>	242 µm
<b>Coating Diameter Tolerance (Colored)</b>	±13 µm
<b>Coating Diameter Tolerance (Uncolored)</b>	±5 µm
<b>Coating/Cladding Concentricity Error, maximum</b>	12 µm
<b>Core/Clad Offset, maximum</b>	0.5 µm
<b>Proof Test</b>	689.476 N/mm <sup>2</sup>   100000 psi

### Dimensions

<b>Fiber Curl, minimum</b>	4 m   13.123 ft
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### Mechanical Specifications

<b>Macrobending, 20 mm Ø mandrel, 1 turn</b>	0.75 dB @ 1,550 nm   1.50 dB @ 1,625 nm
<b>Macrobending, 30 mm Ø mandrel, 10 turns</b>	0.25 dB @ 1,550 nm   1.00 dB @ 1,625 nm
<b>Macrobending, 60 mm Ø mandrel, 100 turns</b>	0.05 dB @ 1,550 nm   0.05 dB @ 1,625 nm
<b>Coating Strip Force, maximum</b>	8.9 N   2.001 lbf
<b>Coating Strip Force, minimum</b>	1.3 N   0.292 lbf

# CS-8F-250-EMEA

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**Dynamic Fatigue Parameter, minimum** 20

## Optical Specifications

**Cabled Cutoff Wavelength, maximum** 1250 nm

**Point Defects, maximum** 0.05 dB

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

**Zero Dispersion Wavelength, maximum** 1324 nm

**Zero Dispersion Wavelength, minimum** 1300 nm

## Optical Specifications, Wavelength Specific

**Attenuation, maximum** 0.21 dB/km @ 1,550 nm | 0.24 dB/km @ 1625 nm | 0.25 dB/km @ 1,490 nm | 0.35 dB/km @ 1,310 nm | 0.35 dB/km @ 1,385 nm

**Dispersion, maximum** 18 ps(nm-km) at 1550 nm | 2.2 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 nm | 9.2  $\mu\text{m}$  @ 1,310 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** 0.06 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