

Fiber indoor/outdoor cable, TeraSPEED®, Single Jacket/Single Armor, Low Smoke Zero Halogen (LSZH), 12 fiber, Singlemode G.652.D and G. 657.A1, 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 OS2 SM 12 FIBER EN50575 CLASS B

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

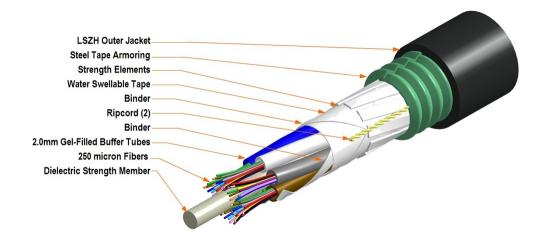
Subunit, quantity 6
Fibers per Subunit, quantity 12
Total Fiber Count 12

Dimensions

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

### Representative Image





### Mechanical Specifications

Minimum Bend Radius, loaded 200 mm | 7.874 in

Minimum 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.652.D and G.657.A1, TeraSPEED® | OS2 | OS2

**Environmental Specifications** 

Installation temperature -30 °C to +60 °C (-22 °F to +140 °F)

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**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  $+75 \,^{\circ}\text{C}$  ( $-40 \,^{\circ}\text{F}$  to  $+167 \,^{\circ}\text{F}$ )

Cable Qualification Standards EN 187105 | IEC 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**  $-30 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \, (-22 \,^{\circ}\text{F to } +140 \,^{\circ}\text{F})$ 

Low High Bend Test Method IEC 60794-1 E11

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

**Temperature Cycle Test Method** IEC 60794-1 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-8W-250-EMEA – LightScope® ZWP Singlemode Fiber 8W-250um

#### \* Footnotes

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



# CS-8W-250-EMEA | 8W-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 1.50 dB @ 1,625 nm

 Macrobending, 30 mm Ø mandrel, 10 turns
 0.25 dB @ 1,550 nm
 1 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-8W-250-EMEA | 8W-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 | 1.467 @ 1,385 nm | 1.468 @ 1,550

nm

 $\textbf{Mode Field Diameter} \hspace{1.5cm} 10.4~\mu\text{m} \ \textcircled{@} \ 1,550~\text{nm} \hspace{0.2cm} | \hspace{0.2cm} 9.2~\mu\text{m} \ \textcircled{@} \ 1,310~\text{nm}$ 

**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

