

Fiber Indoor/Outdoor Cable, 12-fiber, singlemode G.652.D and G.657.A1, Gel-filled, yellow jacket color, Eca Flame Rating, Meters jacket marking, 2000 meters

OBSOLETE

This product was discontinued on: March 31, 2023

## Product Classification

|                       |                                     |
|-----------------------|-------------------------------------|
| Regional Availability | Asia   Australia/New Zealand   EMEA |
| Portfolio             | CommScope®                          |
| Product Type          | Fiber indoor/outdoor cable          |
| Product Series        | C-CN                                |

## General Specifications

|                              |            |
|------------------------------|------------|
| Cable Type                   | Loose tube |
| Subunit Type                 | Gel-filled |
| Jacket Color                 | Yellow     |
| Jacket Marking               | Meters     |
| Fibers per Subunit, quantity | 12         |
| Total Fiber Count            | 12         |

## Dimensions

|                      |                      |
|----------------------|----------------------|
| Cable Length         | 2000 m   6,561.68 ft |
| Diameter Over Jacket | 6.4 mm   0.252 in    |

## Mechanical Specifications

|                                   |                     |
|-----------------------------------|---------------------|
| Minimum Bend Radius, loaded       | 140 mm   5.512 in   |
| Minimum Bend Radius, unloaded     | 130 mm   5.118 in   |
| Tensile Load, long term, maximum  | 400 N   89.924 lbf  |
| Tensile Load, short term, maximum | 500 N   112.404 lbf |

## Optical Specifications

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

# 2-599164-4 | C-012-CN-8W-M12YL/AY

## Optical Specifications, Wavelength Specific

|                      |                                 |
|----------------------|---------------------------------|
| Attenuation, maximum | 0.35 dB/km @ 1,300 nm           |
| Standards Compliance | IEC 60794-1   TIA-492CAAB (OS2) |

## Environmental Specifications

|  |  |
|--|--|
| Operating Temperature                        | -20 °C to +60 °C (-4 °F to +140 °F)      |
| EN50575 CPR Cable EuroClass Fire Performance | Eca                                      |
| Environmental Space                          | Universal Low Smoke Zero Halogen (ULSZH) |

## Packaging and Weights

|              |                          |
|--------------|--------------------------|
| Cable weight | 33 kg/km   22.175 lb/kft |
|--------------|--------------------------|

## Regulatory Compliance/Certifications

| Agency     | Classification   |
|------------|--|
| CENELEC    | EN 50575 compliant, Declaration of Performance (DoP) available   |
| CHINA-ROHS | Below maximum concentration value  |
| REACH-SVHC | Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| 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

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, maximum             | 8.9 N   2.001 lbf                       |
| Coating Strip Force, minimum             | 1.3 N   0.292 lbf                       |
| Dynamic Fatigue Parameter, minimum       | 20                                      |

Optical Specifications

# CS-8W-250-EMEA | 8W-250um

|                                     |                     |
|-------------------------------------|---------------------|
| 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                                    | 0.20 dB/km @ 1550 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   |
| Mode Field Diameter                                     | 10.4 µm @ 1,550 nm   9.2 µm @ 1,310 nm   |
| Mode Field Diameter Tolerance                           | ±0.4 µm @ 1310 nm   ±0.5 µm @ 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 |