# 760238911 | O-008-CA-8W-X08BK/28G/LD

Fiber OSP cable, LightScope® ZWP Single Jacket/Single Armor, Gel-Filled, 8 fibers, Central Tube Cable, Singlemode G.652.D and G.657.A1, Custom jacket marking, Black jacket color

- Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

## Product Classification

| | |
|---|---|
| **Regional Availability** | Asia \| Australia/New Zealand \| EMEA \| Latin America \| North America |
| **Portfolio** | CommScope® |
| **Product Type** | Fiber OSP cable |
| **Product Series** | O-CA |

## General Specifications

| | |
|---|---|
| **Armor Type** | Corrugated steel |
| **Cable Type** | Central loose tube |
| **Construction Type** | Armored |
| **Subunit Type** | Gel-filled |
| **Jacket Color** | Black |
| **Jacket Marking** | Custom printing |
| **Jacket Marking Method** | Inkjet |
| **Jacket Marking Text** | COMMSCOPE GB (MM/YY) NETWORK RAIL SM FIBRE CABLE SM 8 (Serial NO) (METRE MARK) |
| **Subunit, quantity** | 1 |
| **Fibers per Subunit, quantity** | 8 |
| **Total Fiber Count** | 8 |

## Dimensions

| | |
|---|---|
| **Buffer Tube/Subunit Diameter** | 2.8 mm \| 0.11 in |
| **Diameter Over Jacket** | 10 mm \| 0.394 in |

## Representative Image

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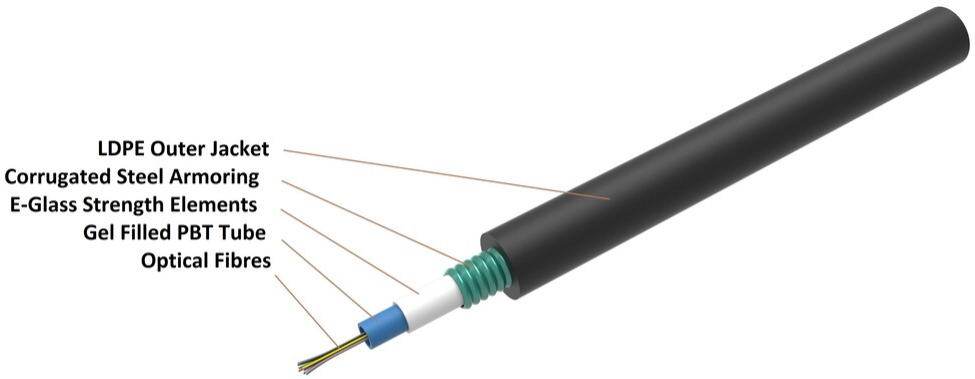


## Material Specifications

| | |
|---|---|
| **Jacket Material** | PE |
| **Inner Jacket Material** | Alternative jacket PE |

## Mechanical Specifications

| | |
|---|---|
| **Minimum Bend Radius, loaded** | 200 mm \| 7.874 in |
| **Minimum Bend Radius, unloaded** | 120 mm \| 4.724 in |
| **Tensile Load, long term, maximum** | 800 N \| 179.847 lbf |
| **Tensile Load, short term, maximum** | 1200 N \| 269.771 lbf |
| **Compression** | 30 N/mm \| 171.304 lb/in |
| **Compression Test Method** | IEC 60794-1 E3 |
| **Flex** | 25 cycles |
| **Flex Test Method** | IEC 60794-1 E6 |
| **Impact** | 5 N-m \| 44.254 in lb |
| **Impact Test Method** | IEC 60794-1 E4 |
| **Strain** | See long and short term tensile loads |
| **Strain Test Method** | IEC 60794-1 E1 |
| **Twist** | 5 cycles |
| **Twist Test Method** | IEC 60794-1 E7 |

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## Optical Specifications

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

## Environmental Specifications

| | |
|---|---|
| **Installation temperature** | -20 °C to +70 °C (-4 °F to +158 °F) |
| **Operating Temperature** | -20 °C to +70 °C (-4 °F to +158 °F) |
| **Storage Temperature** | -20 °C to +70 °C (-4 °F to +158 °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 |
| **Water Penetration Test Method** | FOTP-82 \| IEC 60794-1 F5 |

## Environmental Test Specifications

| | |
|---|---|
| **Temperature Cycle** | -20 °C to +70 °C (-4 °F to +158 °F) |
| **Temperature Cycle Test Method** | IEC 60794-1 F1 |

## Packaging and Weights

| | |
|---|---|
| **Cable weight** | 60 kg/km \| 40.318 lb/kft |
| **Packaging Type** | Reel |

## Included Products

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

## * 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 \| 1.50 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

| | |
|---|---|
| **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 |