

Fiber indoor cable, Low Smoke Zero Halogen Distribution, 12 fiber single-unit, Singlemode G.657.A1, Meters jacket marking, Yellow jacket color

Product Classification

| | |
|------------------------------|------------------------------|
| Regional Availability | Asia Australia/New Zealand |
| Portfolio | CommScope® |
| Product Type | Fiber indoor cable |
| Product Series | N-DS |

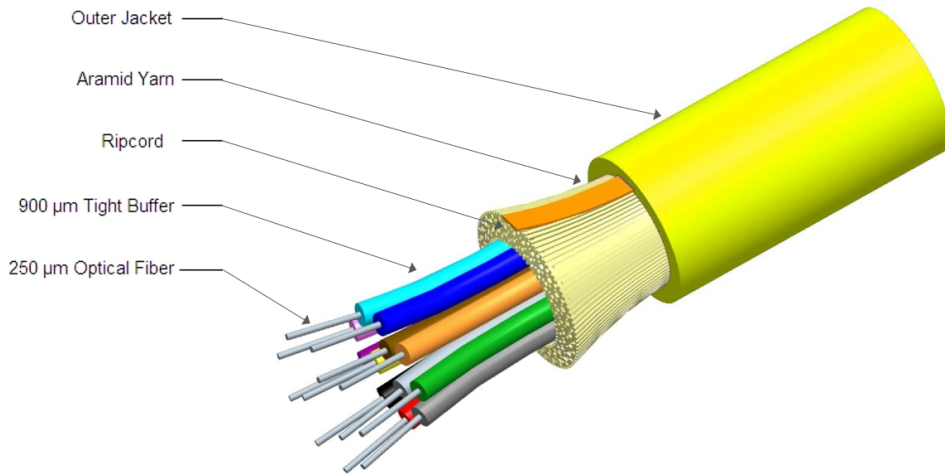
General Specifications

| | |
|--------------------------|--------------|
| Cable Type | Distribution |
| Construction Type | Non-armored |
| Subunit Type | Gel-free |
| Jacket Color | Yellow |
| Jacket Marking | Meters |
| Total Fiber Count | 12 |

Dimensions

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|-----------------------------|-------------------|
| Diameter Over Jacket | 6.2 mm 0.244 in |
|-----------------------------|-------------------|

Representative Image



Mechanical Specifications

| | |
|--|---------------------------------------|
| Minimum Bend Radius, loaded | 124 mm 4.882 in |
| Minimum Bend Radius, unloaded | 62 mm 2.441 in |
| Tensile Load, long term, maximum | 198 N 44.512 lbf |
| Tensile Load, short term, maximum | 660 N 148.374 lbf |
| Compression | 10 N/mm 57.101 lb/in |
| Compression Test Method | IEC 60794-1 E3 |
| Strain | See long and short term tensile loads |
| Strain Test Method | IEC 60794-1-21 E1 |

Optical Specifications

| | |
|-------------------|----------|
| Fiber Type | G.657.A1 |
|-------------------|----------|

Optical Specifications, Wavelength Specific

| | |
|-----------------------------|---|
| Attenuation, maximum | 0.30 dB/km @ 1,550 nm 0.40 dB/km @ 1,310 nm |
|-----------------------------|---|

Environmental Specifications

| | |
|---------------------------------|---------------------------------------|
| Installation temperature | -10 °C to +60 °C (+14 °F to +140 °F) |
| Operating Temperature | -20 °C to +70 °C (-4 °F to +158 °F) |
| Storage Temperature | -40 °C to +70 °C (-40 °F to +158 °F) |
| Environmental Space | Low Smoke Zero Halogen (LSZH) Riser |

| | |
|---------------------------|---------------------------------|
| Flame Test Listing | NEC OFNR (UL) and c(UL) |
| Flame Test Method | IEC 60332-3 UL 1666 UL 1685 |

Environmental Test Specifications

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

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| CHINA-ROHS | Below maximum concentration value |
| REACH-SVHC | Compliant as per SVHC revision on www.commscope.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |



Included Products

CS-8Z-TB-0.40/0.30/093 – Low Water Peak, Dispersion-Unshifted Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-8Z-TB-0.40/0.30/093

Low Water Peak, Dispersion-Unshifted 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 | 1 % |
| Coating Diameter (Colored) | 250 µm |
| Coating Diameter (Uncolored) | 245 µm |
| Coating Diameter Tolerance (Colored) | ±10 µm |
| Coating Diameter Tolerance (Uncolored) | ±10 µm |
| Coating/Cladding Concentricity Error, maximum | 12 µm |
| Core/Clad Offset, maximum | 0.5 µm |
| Proof Test | 689.476 N/mm ² 100000 psi |

Dimensions

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|----------------------------|-----------------|
| Fiber Curl, minimum | 4 m 13.123 ft |
|----------------------------|-----------------|

Mechanical Specifications

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|--|---|
| 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 |
| 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

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|--|---------------------|
| Cabled Cutoff Wavelength, maximum | 1260 nm |
| Point Defects, maximum | 0.1 dB |
| Zero Dispersion Slope, maximum | 0.092 ps/[km-nm-nm] |
| Zero Dispersion Wavelength, maximum | 1324 nm |

CS-8Z-TB-0.40/0.30/093

| | |
|--|---|
| Zero Dispersion Wavelength, minimum | 1300 nm |
| Optical Specifications, Wavelength Specific | |
| Attenuation, maximum | 0.30 dB/km @ 1,550 nm 0.40 dB/km @ 1,310 nm 0.40 dB/km @ 1,385 nm |
| Index of Refraction | 1.467 @ 1,310 nm 1.468 @ 1,550 nm 1.468 @ 1,625 nm |
| Mode Field Diameter | 9.0 μm @ 1,310 nm |
| Mode Field Diameter Tolerance | ± 0.4 μm @ 1310 nm |
| Polarization Mode Dispersion Link Design Value, maximum | 0.1 ps/sqrt(km) |
| Standards Compliance | ITU-T G.652.D ITU-T G.657.A1 TIA-492CAAB (OS2) |

Environmental Specifications

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|--|--------------------|
| 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 |