



Fiber indoor cable, TeraSPEED® Low Smoke Zero Halogen Riser Distribution, 24 fiber single-unit, Gel-free, Singlemode G.652.D and G.657.A1, Feet jacket marking, Yellow jacket color, B2ca flame rating

Product Classification

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

General Specifications

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|--------------------------|--------------|
| Cable Type | Distribution |
| Construction Type | Non-armored |
| Subunit Type | Gel-free |
| Jacket Color | Yellow |
| Jacket Marking | Feet |
| Total Fiber Count | 24 |

Dimensions

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|-----------------------------|--------------------|
| Diameter Over Jacket | 8.82 mm 0.347 in |
|-----------------------------|--------------------|

Representative Image



Mechanical Specifications

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|--|---------------------------------------|
| Minimum Bend Radius, loaded | 132 mm 5.197 in |
| Minimum Bend Radius, unloaded | 88 mm 3.465 in |
| Tensile Load, long term, maximum | 400 N 89.924 lbf |
| Tensile Load, short term, maximum | 1320 N 296.748 lbf |
| Compression | 10 N/mm 57.101 lb/in |
| Compression Test Method | FOTP-41 IEC 60794-1 E3 |
| Flex | 100 cycles |
| Flex Test Method | FOTP-104 IEC 60794-1 E6 |
| Impact | 2.94 N-m 26.021 in lb |
| Impact Test Method | FOTP-25 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 | FOTP-85 IEC 60794-1 E7 |
| Vertical Rise, maximum | 500 m 1,640.42 ft |

Optical Specifications

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|-------------------|----------------------------------|
| Fiber Type | G.652.D and G.657.A1, TeraSPEED® |
|-------------------|----------------------------------|

Environmental Specifications

760241765 | N-024-DS-8W-FSUYL/B2

| | |
|---|---|
| Installation temperature | -10 °C to +50 °C (+14 °F to +122 °F) |
| Operating Temperature | -20 °C to +60 °C (-4 °F to +140 °F) |
| Storage Temperature | -40 °C to +70 °C (-40 °F to +158 °F) |
| Cable Qualification Standards | ANSI/ICEA S-83-596 Telcordia GR-409 |
| EN50575 CPR Cable EuroClass Fire Performance | B2ca |
| EN50575 CPR Cable EuroClass Smoke Rating | s1a |
| EN50575 CPR Cable EuroClass Droplets Rating | d1 |
| EN50575 CPR Cable EuroClass Acidity Rating | a1 |
| Environmental Space | Low Smoke Zero Halogen (LSZH) Riser |
| Flame Test Method | IEC 60332-3 IEC 60754-2 IEC 61034-2 |

Environmental Test Specifications

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|--------------------------------------|--------------------------------------|
| Heat Age | -20 °C to +85 °C (-4 °F to +185 °F) |
| Heat Age Test Method | IEC 60794-1 F9 |
| Low High Bend | -10 °C to +60 °C (+14 °F to +140 °F) |
| Low High Bend Test Method | FOTP-37 IEC 60794-1 E11 |
| Temperature Cycle | -20 °C to +70 °C (-4 °F to +158 °F) |
| Temperature Cycle Test Method | FOTP-3 IEC 60794-1 F1 |

Packaging and Weights

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|---------------------|--------------------------|
| Cable weight | 72 kg/km 48.382 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-TB - TeraSPEED® Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

TeraSPEED® Singlemode Fiber

TeraSPEED®

Product Classification

| | |
|---------------------|---------------|
| Portfolio | CommScope® |
| Product Type | Optical fiber |

General Specifications

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|--|--|
| 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) | ±5 µm |
| Coating/Cladding Concentricity Error, maximum | 12 µm |
| Core Diameter | 8.3 µm |
| Core/Clad Offset, maximum | 0.5 µm |
| Proof Test | 689.476 N/mm ² 100000 psi |
| Tight Buffer Diameter | 900 µm |
| Tight Buffer Diameter Tolerance | ±40 µm |

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 |

CS-8W-TB

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

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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 |
| Zero Dispersion Wavelength, minimum | 1300 nm |

Optical Specifications, Wavelength Specific

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|--|---|
| Attenuation, maximum | 0.50 dB/km @ 1,310 nm 0.50 dB/km @ 1,385 nm 0.50 dB/km @ 1,490 nm 0.50 dB/km @ 1,550 nm 0.50 dB/km @ 1,575 nm 0.70 dB/km @ 1,270 nm |
| Backscatter Coefficient | -79.6 dB @ 1,310 nm -82.1 dB @ 1,550 nm |
| Dispersion, maximum | 18 ps(nm-km) at 1550 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 9.6 µm @ 1,385 nm |
| Mode Field Diameter Tolerance | ±0.4 µm @ 1310 nm ±0.5 µm @ 1550 nm ±0.6 µm @ 1385 nm |
| Polarization Mode Dispersion Link Design Value, maximum | 0.04 ps/sqrt(km) |
| Standards Compliance | ITU-T G.652.D ITU-T G.657.A1 TIA-492CAAB (OS1a) |

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 |

Regulatory Compliance/Certifications

CS-8W-TB

Agency

ISO 9001:2015

Classification

Designed, manufactured and/or distributed under this quality management system

* 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