

CS-8V-MP

Enhanced Low Macrobending, Low Water Peak, Dispersion-Unshifted Single-mode Fiber

Product Classification

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|--------------|---------------|
| 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 | 0.5 % |
| Coating Diameter (Uncolored) | 242 µm |
| Coating Diameter Tolerance (Colored) | ±7 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

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

Mechanical Specifications

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|---|---|
| Macrobending, 15 mm Ø mandrel, 1 turn | 0.50 dB @ 1,550 nm 1.00 dB @ 1,625 nm |
| Macrobending, 20 mm Ø mandrel, 1 turn | 0.10 dB @ 1,550 nm 0.20 dB @ 1,625 nm |
| Macrobending, 30 mm Ø mandrel, 10 turns | 0.03 dB @ 1,550 nm 0.10 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-8V-MP

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|---|---|
| Zero Dispersion Wavelength, minimum | 1300 nm |
| Optical Specifications, Wavelength Specific | |
| Attenuation, maximum | 0.40 dB/km @ 1,310 nm 0.40 dB/km @ 1,385 nm 0.40 dB/km @ 1,550 nm |
| Backscatter Coefficient | -79.1 dB @ 1,310 nm -81.4 dB @ 1,550 nm -82.2 dB @ 1,625 nm |
| Index of Refraction | 1.467 @ 1,310 nm 1.467 @ 1,550 nm 1.468 @ 1,625 nm |
| Mode Field Diameter | 8.9 µm @ 1,310 nm 9.9 µm @ 1,550 nm |
| Mode Field Diameter Tolerance | ±0.4 µm @ 1310 nm ±0.5 µm @ 1550 nm |
| Polarization Mode Dispersion Link Design Value, maximum | 0.1 ps/sqrt(km) |
| Standards Compliance | ITU-T G.657.A2 ITU-T G.657.B2 |

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

| Agency | Classification |
|---------------|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |

Included Products

| | | |
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| CS-8V-LT | – | Enhanced Low Macrobending, Low Water Peak, Dispersion-Unshifted Single-mode Fiber |
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* Footnotes

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