CS-8R-LT

Type 8R Optical Fiber Non-Zero Dispersion-Shifted Singlemode Fiber for Wideband Optical Transport; ITU-T G655.C,E | G656

Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Diameter 125 µm **Cladding Diameter Tolerance** $\pm 0.7 \, \mu m$ 0.7 % **Cladding Non-Circularity, maximum Coating Diameter (Colored)** 256 µm **Coating Diameter (Uncolored)** $245 \, \mu m$ **Coating Diameter Tolerance (Colored)** ±8 µm **Coating Diameter Tolerance (Uncolored)** ±5 µm Coating/Cladding Concentricity Error, maximum 12 µm

Proof Tensile Stress 100,000 psi (0.69 GPa)

Dimensions

Core/Clad Offset, maximum

Fiber Curl, minimum 4 m | 13.123 ft

Mechanical Specifications

Macrobending, 32 mm Ø mandrel, 1 turn 0.50 dB @ 1,550 nm

Macrobending, 75 mm Ø mandrel, 100 turns 0.05 dB @ 1,550 nm | 0.05 dB @ 1,625 nm

 $0.5 \, \mu m$

Coating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

Cabled Cutoff Wavelength, maximum 1310 nm

Dispersion Slope 0.045 ps/[km-nm-nm] @ 1,550 nm

Point Defects, maximum 0.1 dB

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CS-8R-LT

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.23 dB/km @ 1,550 nm | 0.26 dB/km @ 1,625

nm | 0.45 dB/km @ 1,310 nm

Attenuation, typical 0.20 dB/m @ 1,550 nm

Dispersion, maximum 5.5 ps(nm-km) to 8.9 ps(nm-km) from 1530 nm to 1565 nm

at 1550 nm | 6.9 ps(nm-km) to 11.4 ps(nm-km) from

1565 nm to 1625 nm at 1625 nm

Index of Refraction 1.470 @ 1,550 nm | 1.470 @ 1,625 nm | 1.471 @ 1,310

nm

 $\textbf{Mode Field Diameter} \hspace{1.5cm} 8.6~\mu m \ @ \ 1,550~nm \quad | \ \ 9.1~\mu m \ @ \ 1,625~nm$

Mode Field Diameter Tolerance $\pm 0.4 \, \mu \text{m} \ @ \ 1550 \, \text{nm} \quad | \quad \pm 0.6 \, \mu \text{m} \ @ \ 1625 \, \text{nm}$

Polarization Mode Dispersion Link Design Value, maximum 0.04 ps/sqrt(km)

Standards Compliance ITU-T G.655 | ITU-T G.656

Regulatory Compliance/Certifications

Agency Classification

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