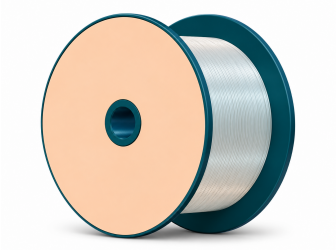
LUXA

Bend-Insensitive Polarization-Maintaining Fiber

Bend-insensitive polarization-maintaining fiber for compact optical components at 1310 or 1550 nm. Bend performance is specified over ten turns at a diameter of 15 mm for BI models and 10 mm for BIR5 models.



Technical specifications

Model	PM1310/125-13/245G-BI	PM1550/125-18/245G-BI
Operating wavelength (nm)	1310	1550
Cutoff wavelength (nm)	1100–1260	1290–1520
Mode-field diameter (µm)	7.8 ± 0.5	9.0 ± 0.5
Attenuation (dB/km)	≤3.0	≤3.0
Beat length (mm)	≤3.0	≤3.0
Bend test diameter (mm), 10 turns	15	15
Bend crosstalk at operating wavelength (dB)	≤−30	≤−30
Macrobending loss at operating wavelength (dB)	≤0.1	≤0.1
Cladding diameter (µm)	125.0 ± 1.0	125.0 ± 1.0
Coating diameter (µm)	245.0 ± 7.0	245.0 ± 7.0
Cladding non-circularity (%)	≤1.0	≤1.0
Core/cladding concentricity error (µm)	≤0.5	≤0.5
Coating	Dual-layer UV-cured acrylate	Dual-layer UV-cured acrylate
Operating temperature (°C)	−55 to +85	−55 to +85
Proof stress (kpsi)	≥100	≥100

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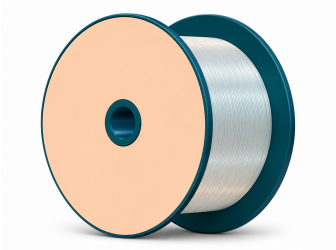

Technical specifications

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Attenuation (dB/km)	≤3.0	≤3.0
Beat length (mm)	≤3.0	≤3.0
Bend test diameter (mm), 10 turns	10	10
Bend crosstalk at operating wavelength (dB)	≤−30	≤−30
Macrobending loss at operating wavelength (dB)	≤0.1	≤0.1
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