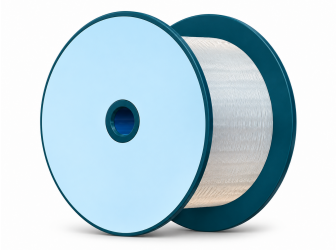
Reduced-Diameter Bend-Insensitive PM Fiber

Reduced-diameter polarization-maintaining fiber with 80 µm cladding and a 165 µm coating for compact optical components. Bending performance is specified at a 10 mm diameter for both operating wavelengths.



Technical specifications

Model	PM1310-80/165G-BIR5	PM1550-80/165G-BIR5
Operating wavelength (nm)	1310	1550
Cutoff wavelength (nm)	1100–1260	1290–1520
Mode-field diameter (µm)	7.4 ± 0.5	8.6 ± 0.5
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)	≤0.5	≤0.5
Cladding diameter (µm)	80.0 ± 0.5	80.0 ± 0.5
Coating diameter (µm)	165.0 ± 5.0	165.0 ± 5.0
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