

Single-mode bend resistant fiber



INTENDED FOR:

- Application in fiber-optic sensors with small bending diameters of the optical fiber.
- Application in fiber-optic communication lines when laying optical fiber in splice cassettes.

FEATURES:

- Working wavelength 1550 nm
- Minimum bending diameter without increasing optical losses
- Small optical losses on working wavelength

OPTICAL SPECIFICATIONS

Maximum attenuation (for wavelength 1550 nm)	not more than 0.45 dB/km
Numerical aperture	0,187
Cable cutoff wavelength (λ_{cc})	$\lambda_{cc} \leq 1480$ nm
Mode-field diameter (for wavelength 1550 nm)	$9,1 \pm 0,5$ μ m

Macrobend losses

Mandrel diameter, mm	Number of turns	Wavelength, nm	Induced attenuation, dB
3,5	1	1550	0,03
5	1	1550	0,01
7	1	1550	0,01

Weld losses

Optical losses, dB	Welding fiber	Wavelength, nm
0.425	SMF-125	1550



DIMENSIONAL SPECIFICATIONS

Glass geometry:

Cladding diameter	$125,0 \pm 0,1$ μ m
Core diameter	8,3 μ m
Core-clad concentricity	$\leq 0,8$ μ m
Cladding non-circularity	$\leq 0,2$ %

Coating geometry:

Coating diameter	250 ± 10 μ m
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Coating type: Dual layer acrylate
Operating Temperature Range: - 60°C to + 85°C

Fiber length available from 0.5 km/spool.

The entire fiber length is subjected to a tensile stress ≥ 100 kpsi (0.69 GPa).*

*High proof test levels available.