

1310/1550 nm Select Cutoff Single-Mode Fibers



Nufern's 1310B-HP and 1310B-HP-V0 high-performance Select Cutoff single-mode fibers are optimized for dual wavelength applications at 1310 and 1550 nm and feature reduced bend sensitivity in the key 1550 nm band, while maintaining low splice loss to industry standard SMF-28™ fiber. Also available with 900 micron V-0 flame rated PVDF secondary buffer in accordance with UL94 in 12 standard colors and with customer specific printing on request. These fibers have virtually no buffer shrinkage over - 40°C to + 85°C operating temperature.

Typical Applications

- 1310 and 1550 nm components
- Pigtailling in small form metro components

Features & Benefits

- Tightly controlled cutoff wavelength — Reduced bend loss at 1550 nm
- Mode matched to SMF-28 — Low splice loss to standard fibers
- Printing available — Customer specific for serialization
- PVDF secondary coating — Flame retardant buffer, with virtually no temperature shrinkage

Optical Specifications

	1310B-HP	1310B-HP-V0
Operating Wavelength	1300 – 1625 nm	1300 – 1625 nm
Core NA	0.130	0.130
Mode Field Diameter	8.6 ± 0.5 μm @ 1310 nm 9.7 ± 0.5 μm @ 1550 nm	8.6 ± 0.5 μm @ 1310 nm 9.7 ± 0.5 μm @ 1550 nm
Cutoff	1260 ± 30 nm	1260 ± 30 nm
Core Attenuation	≤ 0.5 dB/km @ 1310 nm ≤ 0.5 dB/km @ 1550 nm	≤ 0.5 dB/km @ 1310 nm ≤ 0.5 dB/km @ 1550 nm

Geometrical & Mechanical Specifications

	1310B-HP	1310B-HP-V0
Cladding Diameter	125.0 ± 1.0 μm	125.0 ± 1.0 μm
Core Diameter	8.5 μm	8.5 μm
Coating Diameter	245.0 ± 15.0 μm	245.0 ± 15.0 μm
Coating Concentricity	< 5.0 μm	< 5.0 μm
Core/Clad Offset	≤ 0.50 μm	≤ 0.50 μm
Coating Material	UV Cured, Dual Acrylate	UV Cured, Dual Acrylate
First Buffer Diameter	N/A	900.0 ± 50.0 μm
Buffer Concentricity	N/A	≤ 85 μm
First Buffer Material	N/A	PVDF - Meets UL 94 V-0 Specification
Operating Temperature Range	-55 to 85 °C	-40 to 85 °C
Short Term Bend Radius	≥ 6 mm	≥ 6 mm
Long Term Bend Radius	≥ 13 mm	≥ 13 mm
Proof Test Level	≥ 200 kpsi (1.4 GN/m ²)	≥ 200 kpsi (1.4 GN/m ²)



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Custom developed fiber (FUD) specifications are subject to change without notice. Other configurations such as alternative form factors, optimized cut-off and UV cured color coating may be available. Let us know how Nufern can assist with your requirements.