



NuBEAM 200 μm Core Beam Delivery Fibers

Nufern's beam delivery NuBEAM specialty multimode step-index fibers are designed for compatibility with the majority of fiber interconnect systems and diode laser power delivery systems. These fibers feature a 200 micron core diameter, 0.22 NA and are available in three different clad diameters with a silicone coating and a transparent nylon buffer. These fibers are also available with Nufern's proprietary NuCOAT-FA coating for added power confinement or polyimide for high temperature applications. Additional clad diameters and different NAs are available upon request.

Typical Applications

- Fiber coupled diode lasers
- Couplers and pump combiners
- Beam delivery cables
- Spectroscopy and instrumentation

Features & Benefits

- Robust industry standard design — Compatible with majority of fiber interconnect systems
- Exceptional geometric uniformity and core/clad concentricity — Ease of assembly
- Clean room fiber draw — Eliminates coating "hot spots"
- Pure Silica Core — High resistance to optical damage

Optical Specifications

Operating Wavelength
Core NA
OH Level

BD-S200/240-STN

800 – 2100 nm
0.215 \pm 0.005
Low

BD-S200/220/360-STN

800 – 2100 nm
0.220 \pm 0.020
Low

BD-S200/230/660-STN

800 – 2100 nm
0.220 \pm 0.020
Low

Geometrical & Mechanical Specifications

Cladding Diameter (inner)
Second Cladding Diameter
Core Diameter
First Buffer Diameter
Second Buffer Diameter
First Buffer Material
Second Buffer Material
Short Term Bend Radius
Long Term Bend Radius
Proof test Level

242.0 \pm 2.0 μm

N/A

202.0 \pm 2.0 μm

335.0 \pm 35.0 μm

470 \pm 40 μm

Silicone

Transparent Nylon

\geq 12 mm

\geq 36 mm

\geq 100 kpsi (0.7 GN/m²)

226.0 \pm 6.0 μm

367.5 \pm 7.5 μm

204.0 \pm 4.0 μm

460.0 \pm 13.0 μm

650 \pm 32 μm

Silicone

Transparent Nylon

\geq 18 mm

\geq 54 mm

\geq 100 kpsi (0.7 GN/m²)

237.0 \pm 7.0 μm

672.5 \pm 12.5 μm

204.0 \pm 4.0 μm

780.0 \pm 20.0 μm

1100 \pm 55 μm

Silicone

Transparent Nylon

\geq 66 mm

\geq 198 mm

\geq 100 kpsi (0.7 GN/m²)



Buffer Requirements: Silicone Primary Buffer, Transparent Nylon Outer Buffer
Low or High -OH Core: Low
Matched or Depressed Cladding: Depressed
Special Core Dopants: Pure Silica Core

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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.

