



NuBEAM 300 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. This fiber features a 300 micron core diameter, 0.22 NA and 360 micron clad diameter with a silicone coating and a transparent nylon buffer. This fiber is 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-S300/330/360-STN

800 – 2100 nm
0.220 \pm 0.020
Low

Geometrical & Mechanical Specifications

First Cladding Diameter (inner)	340.5 \pm 10.5 μm
Second Cladding Diameter	367.5 \pm 7.5 μm
Core Diameter	306.0 \pm 6.0 μm
First Buffer Diameter	460 \pm 14 μm
Second Buffer Diameter	650 \pm 33 μm
First Buffer Material	Silicone
Second Buffer Material	Transparent Nylon
Short Term Bend Radius	\geq 18 mm
Long Term Bend Radius	\geq 54 mm
Proof test Level	\geq 100 kpsi (0.7 GN/m ²)



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

7 Airport Park Road, East Granby, CT 06026 • 860.408.5000 • Toll-free 866.466.0214 • Fax 860.844.0210 • E-mail info@nufern.com • www.nufern.com • Nufern products are manufactured under an ISO 9001:2008 certified quality management system.

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.

