

NuBEAM 400 μm Core Beam Delivery Fiber



Coherent'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 400 micron core diameter, 0.22 NA and 660 micron clad diameter with a silicone coating and a transparent nylon buffer. This fiber is also available with Coherent'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	800 – 2100 nm
Core NA	0.220 \pm 0.020
OH Level	Low

Geometrical & Mechanical Specifications

First Cladding Diameter (inner)	453.0 \pm 13.0 μm
Second Cladding Diameter	672.5 \pm 12.5 μm
Core Diameter	408.0 \pm 8.0 μm
First Buffer Diameter	780.0 \pm 20.0 μm
Second Buffer Diameter	1100 \pm 55 μm
First Buffer Material	Silicone
Second Buffer Material	Transparent Nylon
Short Term Bend Radius	\geq 66 mm
Long Term Bend Radius	\geq 198 mm
Proof test Level	\geq 100 kpsi (0.7 GN/m ²)

BD-S400/440/660-STN



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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 www.coherent.com ; www.shop.coherent.com • Coherent 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 Coherent can assist with your requirements.