



Coherent | Nufern's large mode area (LMA) passive single and double clad fibers are ideally suited for applications spanning military, industrial and medical including linearly polarized fiber lasers and amplifiers. These fibers feature a 10 micron diameter core and 125 micron diameter clad size with a low NA core. They are precision matched to their LMA Yb-doped 10/125 matched counterparts to ensure excellent splice compatibility and low loss. As with all Coherent | Nufern standard LMA fibers, these fibers are proof-tested to 100 kpsi, an industry requirement for long term reliability. They utilize the latest fiber design and the double clad fibers features NuCOAT-FA coating technology to ensure excellent preservation of beam quality and extended operating life demanded by today's industrial fiber laser applications.

# **Typical Applications**

- · Pulsed fiber lasers and amplifiers
- Material processing
- LIDAR
- Non-linear optics/frequency doubling

#### Features & Benefits

- NuCOAT-FA fluoroacrylate coating Greater fiber durability in extreme environmental operating & storage conditions
- · Bend insensitive Survives application in tight confines
- Optimized LMA core design Easy to maintain single mode LP01 beam through fiber & components at high power
- · Precision Matched (M) Providing low splice loss
- All fiber proof tested to > 100 kpsi Critical for ensuring long term reliability

### **Optical Specifications**

Operating Wavelength Core NA First Cladding NA (5%) Core Attenuation

Cladding Attenuation

#### Geometrical & Mechanical Specifications

Cladding Diameter
Core Diameter
Coating Diameter
Coating Concentricity
Core/Clad Offset
Clad Non-Circularity
Coating Material
Prooftest Level

### LMA-GSF-10/125-M

1015 - 1115 nm 0.075 ± 0.005

N/A

≤ 40.0 dB/km @ 1300 nm ≤ 20.0 dB/km @ 1200 nm

N/A

125.0 ± 1.0 µm 11.0 ± 1.0 µm

 $245.0 \pm 10.0 \, \mu m$  <  $5.0 \, \mu m$ 

≤ 0.70 µm ≤ 0.5 %

≤ 0.5 % Acrylate

≥ 100 kpsi (0.7 GN/m²)

MO5-A-017-A

## LMA-GDF-10/125-M

1015 – 1115 nm 0.080 ± 0.005

 $\geq 0.46$ 

≤ 0.5 %

Low Index Acrylate

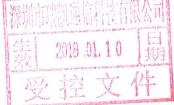
≥ 100 kpsi (0.7 GN/m²)

≤ 40.0 dB/km @ 1300 nm

 $\leq$  20.0 dB/km @ 1200 nm

≤ 15 dB/km @ 1095 nm







Coating Non-Circularity < 2% Designed to work with 10/125 LMA Yb-doped active fibers, especially LMA-YDF-10/125-9M

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