

# 20/125 Precision Matched Passive LMA Fiber



Coherent | Coherent's large mode area (LMA) passive double clad fibers are ideally suited for applications spanning military, industrial and medical including linearly polarized fiber lasers and amplifiers. This fiber features a 20 micron diameter core and 125 micron diameter clad size with a low NA (0.08) core. The fiber is precision matched to its LMA Yb-doped 20/125 matched counterpart to ensure excellent splice compatibility and low loss. As with all Coherent | Coherent standard LMA fibers, this fiber is proof-tested to 100 kpsi, an industry requirement for long term reliability. The fiber utilizes the latest fiber design and the double clad fiber 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
- 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 when coiling

## Optical Specifications

Operating Wavelength	1015 – 1115 nm
Core NA	0.080 ± 0.005
First Cladding NA (5%)	≥ 0.46
Core Attenuation	≤ 40.0 dB/km @ 1300 nm
	≤ 20.0 dB/km @ 1200 nm
Cladding Attenuation	≤ 15.0 dB/km @ 1095 nm

## LMA-GDF-20/125-M 1341630

## Geometrical & Mechanical Specifications

Cladding Diameter	125.0 ± 1.0 μm
Core Diameter	20.0 ± 1.5 μm
Coating Diameter	245.0 ± 10.0 μm
Coating Concentricity	< 5.0 μm
Core/Clad Offset	≤ 0.70 μm
Clad Non-Circularity	≤ 0.5 %
Coating Material	Low Index Acrylate
Proof-test Level	≥ 100 kpsi (0.7 GN/m <sup>2</sup> )



Coating Non-Circularity < 2%  
Precision matched to LMA-YDF-20/125-9M

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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.

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