10/400 Passive LMA Double Clad Fiber

Coherent's passive series of Large Mode Area (LMA) double clad fibers are ideal for high power monolithic fiber lasers and amplifiers. These passive fibers are based on a 10 micron diameter core and 400 micron diameter clad size with a low NA (0.08) core and are designed to work well with the active Yb-doped 10/400 LMA fibers. These fibers utilize the latest fiber design and NuCOAT™ coating technology to ensure excellent preservation of beam quality and extended operating life at the high power levels demanded by today's industrial fiber laser applications. These fibers are available in both non-PM and PANDA-style PM fibers.

Typical Applications

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

Features & Benefits

- Designed for compatibility with 10/400 active fibers
- NuCOAT™ 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
- All fiber proof tested to > 100 kpsi — Critical for ensuring long term reliability when coiling

Optical Specifications	**PLMA-GDF-10/400**	**LMA-GDF-10/400**
Operating Wavelength	1060 – 1600 nm	1060 – 1600 nm
Core NA	0.077 ± 0.007	0.077 ± 0.007
First Cladding NA (5%)	≥ 0.46	≥ 0.46
Cladding Attenuation	≤ 15.0 dB/km @ 1095 nm	≤ 15.0 dB/km @ 1095 nm
Birefringence	nominal 3×10^{-4}	N/A
Geometrical & Mechanical Specifications		
Cladding Diameter	400.0 ± 10.0 µm	400.0 ± 10.0 µm
Core Diameter	11.5 ± 1.0 µm	11.5 ± 1.0 µm
Coating Diameter	550.0 ± 15.0 µm	550.0 ± 15.0 µm
Prooftest Level	≥ 100 kpsi (0.7 GN/m²)	≥ 100 kpsi (0.7 GN/m²)

COHERENT

Designed to work with 10/400 LMA Yb-doped active fibers.

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www.coherent.com ; www.shop.coherent.com • Coherent products are manufactured under an ISO 9001:2008 certified quality management system.

RoHS compliant

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