12/130 Precision Matched Passive 1550 nm Double Clad Fibers

Nufern's precision matched passive double-clad fibers are available in two-versions — multimoded and PANDA-style, polarization-maintaining (PM). These fibers feature a 12 µm core diameter and a 130 µm clad diameter optimized to match Nufern's active Er/Yb 12/130 µm fibers. This precise matching allows for the lowest splice loss improving performance for all applications including high power pulsed fiber lasers and amplifiers. They utilize the latest fiber design and NuCOAT™ coating technology to ensure excellent preservation of beam quality and extended operating life demanded by today's industrial fiber laser applications.

Typical Applications

- LIDAR
- Eye-safe lasers and amplifiers
- High power pulsed fiber lasers and amplifiers

Features & Benefits

- NuCOAT™ fluoroacrylate coating — Greater fiber durability in extreme environmental operating & storage conditions
- Exceptional uniformity and core/clad concentricity — Low connectorization losses
- Bend insensitive — Survives application in tight confines
- All fiber proof tested to > 100 kpsi — Critical for ensuring long term reliability

Optical Specifications	PM-GDF-12/130-M	MM-GDF-12/130-M
Operating Wavelength	1530 – 1800 nm	1530 – 1800 nm
Core NA	0.200	0.200
First Cladding NA (5%)	≥ 0.460	≥ 0.460
Normalized Cross Talk	≤ - 25.0 dB at 10 m @ 1300 nm	N/A

Geometrical & Mechanical Specifications		
Cladding Diameter	130.0 ± 1.0 µm	130.0 ± 1.0 µm
Core Diameter	12.0 ± 1.5 µm	12.0 ± 1.5 µm
Coating Diameter	245.0 ± 10.0 µm	245.0 ± 10.0 µm
Coating Concentricity	< 5.0 µm	< 5.0 µm
Core/Clad Offset	≤ 1.00 µm	≤ 1.00 µm
Prooftest Level	≥ 100 kpsi (0.7 GN/m²)	≥ 100 kpsi (0.7 GN/m²)

M05-A-028-A

Coating Requirements: Low Index Polymer Coating.
Other Requirements: Round fiber. Polarization-maintaining fiber with dual circular stress elements

NUFERN

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Nufern products are manufactured under an ISO 9001:2008 certified quality management system.

RoHS

Standard specifications and design parameters are listed above. 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.

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