

400 Micron Core Power Delivery Fibers



Nufern's specialty multimode step-index fibers are designed for compatibility with the majority of fiber-coupled, bar and stack diode-laser packages and support the diode laser power delivery market. These power delivery fibers are available in 400/440 and 400/480 core/clad ratios in low and high NA versions. The 400/480 has a low refractive index fluoroacrylate coating for added power confinement. Other fiber diameters are available upon request.

Typical Applications

- Fiber coupled diode lasers
- Couplers and pump combiners

Features & Benefits

- 0.12 and 0.22 NA — Compatible with majority of fiber-coupled, diode-laser packages
- Exceptional geometric uniformity and core/clad concentricity — Ease of coupling to pump diodes

Optical Specifications

Operating Wavelength (nominal)	800 – 1600 nm
Numerical Aperture (nominal)	0.12 ± 0.02
Cladding Numerical Aperture	NA
OH Level	Low

Geometrical & Mechanical Specifications

Core Diameter	400 ± 9 µm	400 ± 9 µm	400 ± 9 µm
Clad Diameter	440 ± 8 µm	440 ± 8 µm	480 ± 8 µm
Coating Diameter	625 ± 25 µm	625 ± 25 µm	640 ± 25 µm
Core-Clad Concentricity	< 5 µm	< 5 µm	< 5 µm
Coating Material	UV Cured, Dual Acrylate	UV Cured, Dual Acrylate	Low Index Polymer
Proof Test Level	≥ 100 kpsi (0.7 GN/m ²)	≥ 100 kpsi (0.7 GN/m ²)	≥ 100 kpsi (0.7 GN/m ²)

MM-S400/440-12A

800 – 1600 nm

0.12 ± 0.02

NA

Low

MM-S400/440-22A

800 – 1600 nm

0.22 ± 0.02

NA

Low

MM-S400/480-22FA

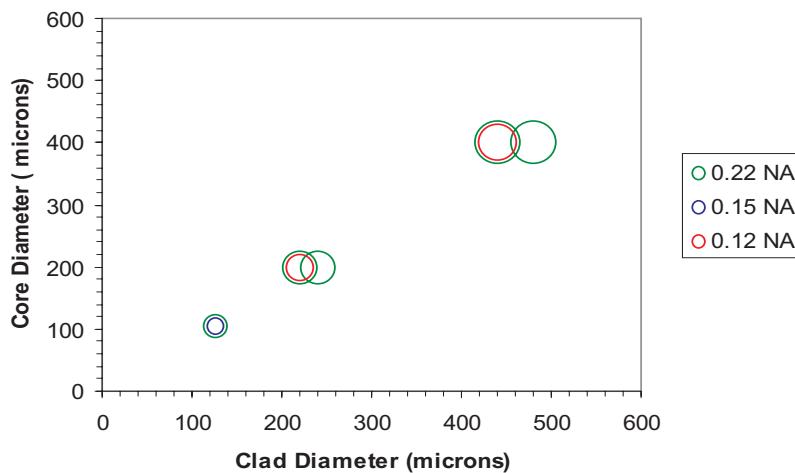
800 – 1600 nm

0.22 ± 0.02

0.46 (nominal)

Low

Nufern Standard Power Delivery Fibers



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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.

