

# LMA-25

## Endlessly Single-Mode 25µm Core Fiber



- High threshold power for nonlinear effects
- Low fiber attenuation
- Endlessly single-mode
- Radiation hard pure silica fiber
- Optional connectors and beam-expansion
- Mode field diameter independent of wavelength

This single-mode large mode area fiber combines a large effective mode field area (~ 265 µm<sup>2</sup>) and low loss to allow high power delivery without nonlinear effects or material damage.

The fiber is endlessly single-mode (i.e. it has no higher order mode cut-off) and, therefore, delivers pristine mode quality at all wavelengths.

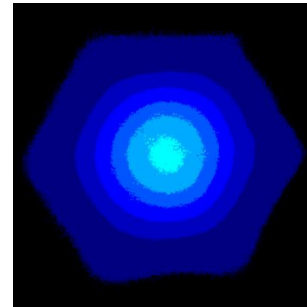
The fiber is available with hermetically sealed ends and FC/PC connectors. For a connectorized fiber, we can customize the amount of fiber end beam expansion.

### Applications

- Single-mode high power delivery
- Multi-wavelength transmission
- Mode filtering
- Single-mode pigtail
- Short pulse delivery

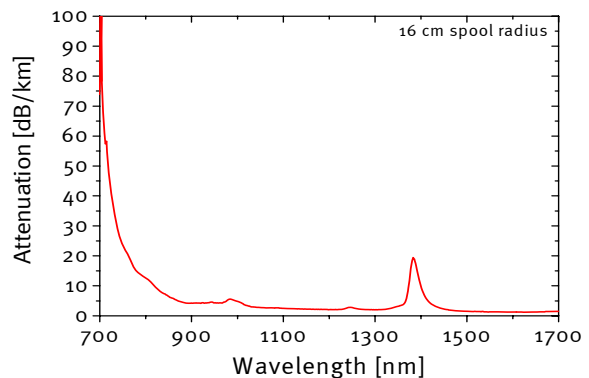
Physical properties	
Material	Pure Silica
Cladding diameter	268 ± 5 µm
Coating diameter	410 ± 10 µm
Coating material, single layer	Acrylate
Core size diameter	25.2 ± 0.4 µm
Optical properties	
Attenuation @ 1064 nm*	<3.5 dB/km
Attenuation @ 1550 nm*	<1.5 dB/km
Cut-off wavelength	None
Mode field diameter	19.8 ± 2.0 µm
Numerical aperture @ 1064 nm	0.04 ± 0.01
Numerical aperture @ 1550 nm	0.06 ± 0.01

\* Measured for a bending radius of 16 cm

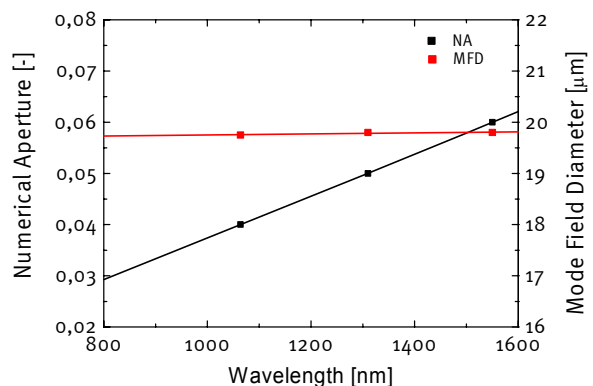


Near field obtained with White Light

### Typical measured spectral attenuation



### Typical measured NA and MFD



LMA-25-100409