

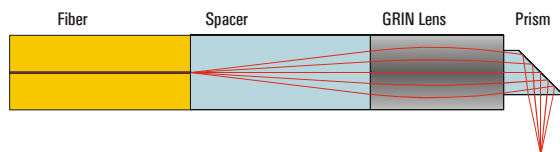
Customized GRIN Lens Assemblies

GRIN Fiber Pigtailed

Applications: fiber optical sensors, biophotonic probes, optical switches, fiber coupling

- Fiber Pigtailed using Gradient Index Rod Lenses
- Focussing, collimating and imaging GRIN lenses
- Use of special fibers on request
- AR and beam splitting coatings on request
- 8° angled facet of fiber and optics possible

Please ask for customized solutions



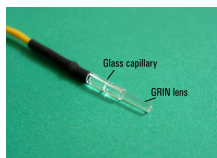
Examples:

Fiber optic sensor

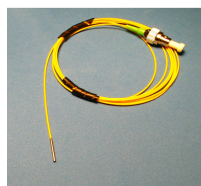


- mounted in stainless steel tube
- GRIN lens diameter: 0.5 / 1.0 / 1.8 mm
- Tube diameter: 0.7 / 1.2 / 2.0 mm
- Side opening for prism exit possible

SMF Pigtail

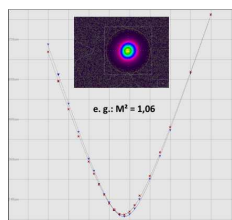


- using glass ferrule and capillary
- GRIN lens diameter: 1.8 mm
- Capillary diameter: 2.8 mm



- using glass ferrule, mounted in stainless steel tube
- GRIN lens diameter: 0.5 / 1.0 / 1.8 mm
- Tube diameter: 0.7 / 1.2 / 2.0 mm

GRIN fiber collimators



Applications: Fiber coupling, telecom components (e.g. Isolators, Circulators, WDM), Signal processing ...

- High beam quality ($M^2 < 1.1$) on compact size
- Customized beam diameter (waist) and waist position
- Low insertion loss / High return loss due to angled facets or/and AR coatings
- High pointing accuracy and pointing stability
- Active alignment of optical – to mechanical axis (e.g. stainless steel tube) on request

Variations due to modifications of the production process are possible.
It is the user's responsibility to determine suitability for the user's purpose.

GRIN Arrays

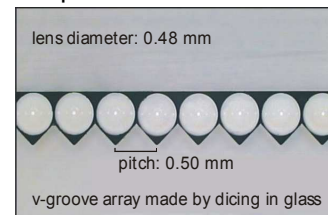
Linear Lens Arrays for collimation / imaging of fiber bundles

Application: telecom components, optical switches, sensor arrays

- 1x8, 1x12, 1x16 GRIN Rod Lens Arrays
- Pitches 250 (± 1) μm / 500 (± 1) μm
- Lens diameter: 240 (± 1) μm / 480 (± 1) μm
- Lens NA: 0.35 / 0.5 / 0.2

Please ask for customized solutions

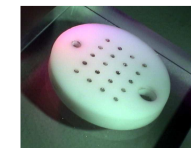
Example:



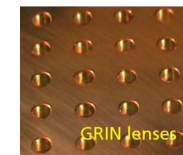
2-D Lens Arrays

Application: multi-imaging sensors, read-out of biochips

Examples:



- 4x5 GRIN Rod Lens
- Array Pitch: 1.60 (± 0.01) mm
- Lens diameter: 1.0 mm
- Lens NA: 0.5
- Mount: machinable ceramic



- Pitch: 4.50 (± 0.02) mm
- Lens diameter: 1.8 mm
- Lens NA: 0.5
- Mount: brass