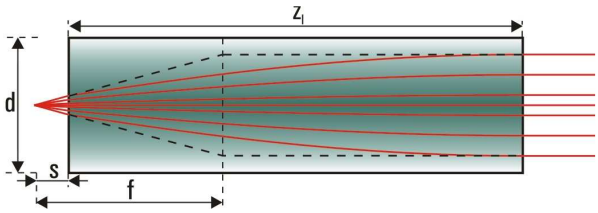
New: GRIN Rod Lenses with intermediate NA = 0.28 – 0.33

Gradient index lenses for fiber coupling, beam shaping of laser diodes and imaging applications



Order example: GT-LFRL-100-025-33-CC (670)

- Design wavelength
- Coating Code
- NA: 0.33
- Pitch: 0.25
- Diameter: 1.0 mm
- Laser Focusing Rod Lens
- GRINTECH

- Working distance, design wavelength and lens length deviating from these standards can also be produced
- 8° angled facet are available on request
- ZEMAX files can be DOWNLOADed from our website

Pitch P	Working distance s (mm)	Numerical Aperture NA	Lens length z_l (mm)	Focal length f (mm)	Gradient constant g (mm^{-1})	Refractive index at the center of the profile n_0	Wavelength λ (nm)	Product code
Diameter d: 0.5 mm								
0.25	0	0.30	2.05	0.83	0.767	1.567	670	GT-LFRL-050-025-30-CC (670)
0.23	0.10	0.30	1,89	0.84	0.767	1.567	670	GT-LFRL-050-023-30-CC (670)
0.25	0	0.29	2.06	0.84	0.762	1.562	810	GT-LFRL-050-025-30-CC (810)
0.23	0.10	0.29	1,90	0.85	0.762	1.562	810	GT-LFRL-050-023-30-CC (810)
0.25	0	0.29	2.08	0.85	0.756	1.556	1310-1550	GT-LFRL-050-025-30-CC (1550)
0.23	0.10	0.29	1.92	0.86	0.756	1.556	1310-1550	GT-LFRL-050-023-30-CC (1550)

GRIN rod lenses are offered with antireflection coatings (R < 0.5 % for the design wavelength and incidence angles of 0 ... 30° corresponding to measurements on a reference substrate)

Coating Code:
- NC: no coating (reflection loss approx. 12 %)
- C1: λ = 450 ... 690 nm
- C2: λ = 800 ... 960 nm
- C5: λ = 1310 ... 1550 nm

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

Tolerances:
lens length z_l: ± 5% due to variations of the gradient constant
working distance s: ± 0.02 mm
diameter d: + 0 / -0.01 mm
Please ask for tighter diameter tolerances

Surface quality:
5 / 3 x 0.025; L 3 x 0.005; E 0 (defined by DIN ISO 10110-7:2000-02).
The surface quality is defined within 90 % of the lens diameter. Outside of this area defects are allowed.

Revision 12/2016

GRINTECH GmbH / Schillerstr. 1 / 07745 Jena / Germany / Phone: +49 (0) 3641/2276-0 / Fax: +49 (0) 3641/2276-11 / www.grintech.de / info@grintech.de