

Fast Axis Collimator Lenses (FACs)

The essential components for laser diodes

We ensure FACs are never the limiting factor of your production scale-up!

Your Benefits

- **Independent supplier:** As a leading and independent manufacturer of FACs in large quantities we support your economic autonomy.
- **Reliability:** Profit from our high-quality production in Switzerland.
- **Large standard portfolio:** Choose from a large variety of standard FAC lenses.
- **Fast ramp-up:** From prototypes to serial production.
- **Customized to needs:** We incorporate your needs in design, coating and packaging.



Technical Data

- Effective Focal length: 200 – 1700 μm
- Material: high index glass with $n > 1.8$
- Covered Wavelength range: 430 – 1550 nm
- Length: 2 – 20 mm



Select your FAC

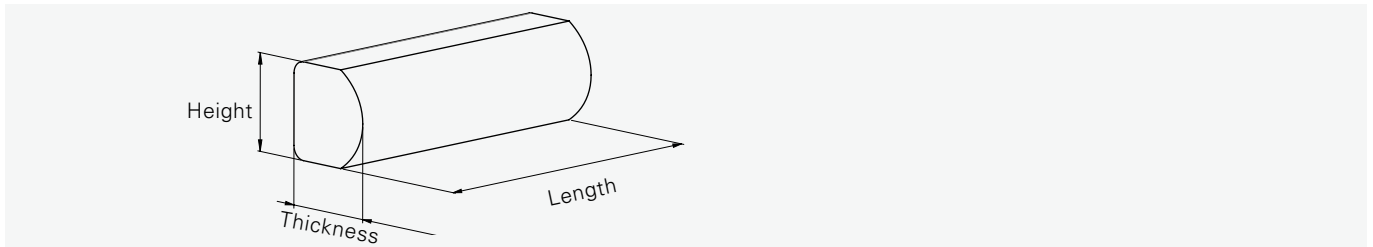


Applications

- Diode Laser Systems
- Fiber Laser Pumps
- Disk Laser Pumps
- Solid-state Laser Pumps
- LiDAR Systems

Fast Axis Collimator Lenses (FACs)

Technical specifications



| | Wavelength Range | Numerical Aperture | Focal Length | | Back Focal Length | | Residual Divergence | | Dimension (Height x Thickness) |
|------------|-------------------------------|--------------------|----------------------|-------------------|----------------------|-------------------|---------------------|---------------------|--------------------------------|
| | | | EFL μm | @ nm | BFL μm | @ nm | mrad* | @ % power enclosure | |
| FAC 200 | 790–990 750–850 | 0.8 | 200 | 940 808 | 55 54 | 940 808 | ±3.00 | 85 | 0.33 x 0.27 |
| FAC 300 | 790–990 750–850 515–705 | 0.8 | 300 300 290 | 940 808 638 | 70 68 65 | 940 808 638 | ±3.00 | 90 | 0.50 x 0.43 |
| FAC 310 | 430–470 | 0.75 | 310 | 450 | 75 | 450 | ±2.25 | 85 | 0.50 x 0.41 |
| FAC 360 | 790–990 | 0.8 | 360 | 940 | 70 | 940 | ±2.43 | 95 | 0.60 x 0.53 |
| FAC 360 | 1450–1550 | 0.8 | 370 | 1470 | 74 | 1470 | ±3.13 | 90 | 0.60 x 0.53 |
| FAC 380 | 430–470 | 0.75 | 380 | 450 | 75 | 450 | ±2.00 | 90 | 0.64 x 0.55 |
| FAC 450 | 790–990 | 0.8 | 450 | 940 | 100 | 940 | ±1.60 | 85 | 0.75 x 0.64 |
| FAC 510 | 790–990 | 0.8 | 510 | 940 | 116 | 940 | ±1.50 | 85 | 0.90 x 0.71 |
| FAC 600 | 790–990 | 0.8 | 600 | 940 | 120 | 940 | ±1.20 | 90 | 1.00 x 0.866 |
| FAC 600 | 790–990 620–750 | 0.5 | 600 590 | 900 670 | 150 131 | 900 670 | ±1.50 | 85 | 0.80 x 0.82 |
| FAC 600 | 430–470 | 0.8 | 600 | 450 | 140 | 450 | ±1.50 | 85 | 1.00 x 0.83 |
| FAC 740 | 790–990 | 0.8 | 740 | 940 | 70 | 940 | ±1.25 | 85 | 1.20 x 1.22 |
| FAC 900 | 790–990 | 0.8 | 900 | 940 | 90 | 940 | ±1.00 | 85 | 1.60 x 1.49 |
| FAC 940 | 790–990 | 0.8 | 940 | 940 | 201 | 940 | ±0.95 | 90 | 1.60 x 1.34 |
| FAC 1100 | 790–990 | 0.7 | 1100 | 940 | 110 | 940 | ±0.80 | 85 | 1.50 x 1.77 |
| FAC 1100 | 790–990 | 0.45 | 1100 | 940 | 152 | 940 | ±0.95 | 85 | 1.10 x 1.72 |
| FAC 1300 | 790–990 | 0.7 | 1300 | 940 | 130 | 940 | ±0.50 | 85 | 1.80 x 2.12 |
| FAC 1500 | 790–990 | 0.7 | 1500 | 940 | 90 | 940 | ±0.55 | 85 | 2.00 x 2.57 |
| FAC 1700** | 620–750 470–550 430–470 | 0.6 | 1690 1680 1650 | 630 520 450 | 1150 1130 1100 | 630 520 450 | ±0.75 | 85 | 2.63 x 1.24 |

All FAC Length (mm): customized to your request

* Measured at NA 0.29

** Design optimized for sources in TO package. BFL does not include 90 μm shift due to cover glass.

Customized designs available upon request