

Fast Axis Collimator

FAC570 FS



Features and Advantages

Acylindrical biconvex lens for the collimation of the fast axis of diode lasers. The lens is made of fused silica and optimized for high power transmission so that it withstands powers of 300 W or even higher.

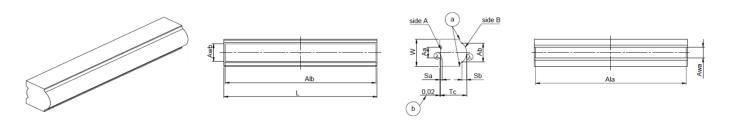
Product Specifications

| Specification Data | Unit | Value |
|--|------|-----------------|
| Material | | Fused Silica |
| Width (W) | mm | 1.0 ± 0.05 |
| Thickness (T) | mm | 0.96 ± 0.05 |
| Refractive index n @ 450 nm | | 1.466 |
| Effective focal length (EFL) @ 450 nm | mm | 0.57 |
| Back focal length (BFL) @ 450 nm | mm | 0.17 |
| Numerical aperture (NA) | | 0.58 |
| Transmission / AOI | %1° | > 99 / 0-30 |
| Power within an angle of ± 1.1 mrad ⁽¹⁾ | % | > 90 |

| Product Code | | ZLE002217 ⁽³⁾ | ZLE002150 | ZLE002284 ⁽³⁾ | ZLE002270 ⁽³⁾ |
|-------------------------|------|----------------------------|----------------------------|----------------------------|----------------------------|
| Specification Data | Unit | Value | | | |
| Length (L) | mm | 14.0 ± 0.1 | 5.6 ± 0.1 | 4.0 ± 0.1 | 14.0 ± 0.1 |
| Clear aperture (Side A) | mm² | 13.0 x 0.4 | 5.0×0.4 | 3.8 x 0.4 | 13.0 x 0.4 |
| Clear aperture (Side B) | mm² | 13.0 x 0.65 | 5.0×0.65 | 3.8 x 0.65 | 13.0 x 0.6 |
| AR-Coating | nm | 400 - 480 | 400 - 480 | 400 - 480 | 790 - 990 |
| Surface imperfections | | 5/5x0.025; C2x0.04; | 5/5x0.025; C2x0.04; | 5/2x0.1; C2x0.1; | 5/5x0.025; C2x0.04; |
| (DIN ISO 10110-7) | | L2x0.025; E ⁽²⁾ | L2x0.025; E ⁽²⁾ | L2x0.025; E ⁽²⁾ | L2x0.025; E ⁽²⁾ |

⁽¹⁾ Valid for an emitter-height of 1µm and no smile of the laser diode.

Product Drawing (mm)



Rev 03 | Updated June 8, 2022 | **RoHS compliant** 2011/65/EU and 2015/863/EU

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⁽²⁾ Chipping on short edge 0.2, chipping on long edge 0.08.

 $^{^{\}rm (3)} \, {\rm Example}$ for customization — design, dimensions & coatings on request.