Rod Lenses

Rod Lenses are cylindrical lenses with polished on its circumference surface. These are used in several applications including laser focusing beam into a line, changing beam shape into sheet-shape or irradiating at a distance with elongated line.

- Focal length shortened by reducing the rod lens diameter compared to cylindrical lenses.
- Precise processing and polishing yields distortion-free, flex free straight line gain when projection is made from a distance.
- Suitable for collecting large amount of light when installed it in front of a line sensor.

**Specifications**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Diameter D [mm]</th>
<th>Length L [mm]</th>
<th>Focal length f [mm]</th>
<th>Back focal length fb [mm]</th>
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<tbody>
<tr>
<td>RODB-03L06</td>
<td>φ3</td>
<td>6</td>
<td>2.2</td>
<td>0.7</td>
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<tr>
<td>RODB-03L08</td>
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<tr>
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<td>3.7</td>
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</table>

**Material**
- BK7

**Design wavelength**
- 546.1nm

**Polish**
- Rod circumference surface polished

**Coating**
- Uncoated

**Surface Quality (Scratch–Dig)**
- 40–20

**Guide**

- Please contact our Sales Division for rod lens with AR coating requirements.
- Contact our Sales Division for customized products. (customized on outer diameter, length, etc.)
- Use MLH-10 (Small Lens Claws) or MLH-SF (Selfoc® Lens Claws) to hold cylindrical lens.

**Attention**

- Align the beam on the circumference sufrace for proper use.
- Notable spherical aberration may occur due to the small curvature of rod lenses it is recommended that you use cylindrical lenses for precise optical systems.
- When diverging laser beam through rod lenses, operators’ eyes may be exposed to diverged beam. Make sure to check the power of laser and to apply safety goggles before using rod lenses.
- Rod lenses are not chamfered use caution when handling the product.

**BK7(Uncoated) Typical Transmittance Data**

**Compatible Optic Mounts**

MLH-10 / MLH-SF + MLH-10ADP-2 + FOP-1