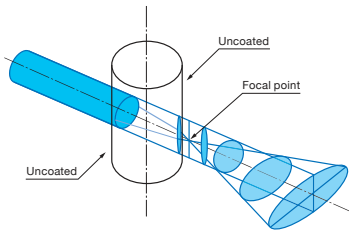


Rod Lenses are cylindrical lenses with polished on its circumference surface. These are used in several applications including laser focusing beam into a line, changing beam shape into sheet-shape or irradiating at a distance with elongated line.

- 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.

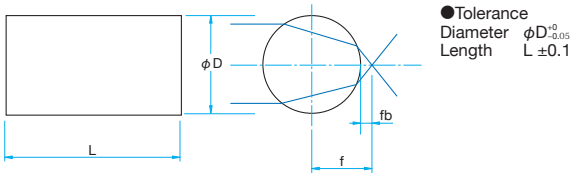


Schematic



Outline Drawing

(in mm)



Specifications

Material	BK7
Design wavelength	546.1nm
Polish	Rod circumference surface polished
Coating	Uncoated
Surface Quality (Scratch-Dig)	40-20

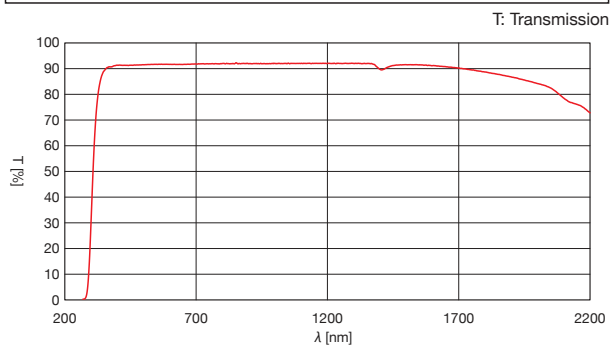
Guide

- ▶ 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 Claw) or MLH-SF (Selfoc® Lens Claws) to hold cylindrical lens.
- ▶ [WEB Reference](#) [Catalog Code](#) W4021, ▶ [WEB Reference](#) [Catalog Code](#) W4051

Attention

- ▶ Align the beam on the circumference surface 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. [Reference](#) B140
- ▶ 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



Specifications

Part Number	Diameter φD [mm]	Length L [mm]	Focal length f [mm]	Back focal length fb [mm]
RODB-03L06	φ3	6	2.2	0.7
RODB-03L08	φ3	8	2.2	0.7
RODB-03L10	φ3	10	2.2	0.7
RODB-04L06	φ4	6	2.9	0.9
RODB-04L08	φ4	8	2.9	0.9
RODB-04L10	φ4	10	2.9	0.9
RODB-05L06	φ5	6	3.7	1.2
RODB-05L08	φ5	8	3.7	1.2
RODB-05L10	φ5	10	3.7	1.2

Compatible Optic Mounts

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