

Adjustable Fiber Collimator | FOPT



Catalog Code W4526

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Fiber

The adjustable collimator holder can be used to collimate the output of an optical fiber of FC or SMA type connector.

- These holders can adjust the divergence, outgoing direction, and center position of the luminance distribution (fiber rotation and tilt) of a beam.
- The objective lens included with this holder has a short focal length (OBL-10) so that collimated light with small beam diameter can be obtained.
- The objective lenses used in these holders are standard microscope objectives so that high transmittance and high performance (spherical aberration) can be obtained in the visible light range.
- When used with a single-mode fiber, the output beam will have a Gaussian distribution.



Guide

- ▶ Post length can be changed by specifying the post length when you place an order. We may charge the difference in price depending on the length. Contact our Sales Division for more information.
- ▶ A dummy FC connector is included, but should not be used for an optical fiber.

Attention

- ▶ To launch light into a single-mode fiber, a more precise adjustment mechanism is required. Contact our Sales Division for more information.
- ▶ Some types of connectors may be difficult to mount on the receptacles of two-axis pinholes/objective holders.
- ▶ The collimated beam diameter changes depending on the NA of the fiber. Generally, beam diameter D is found with the following formula.

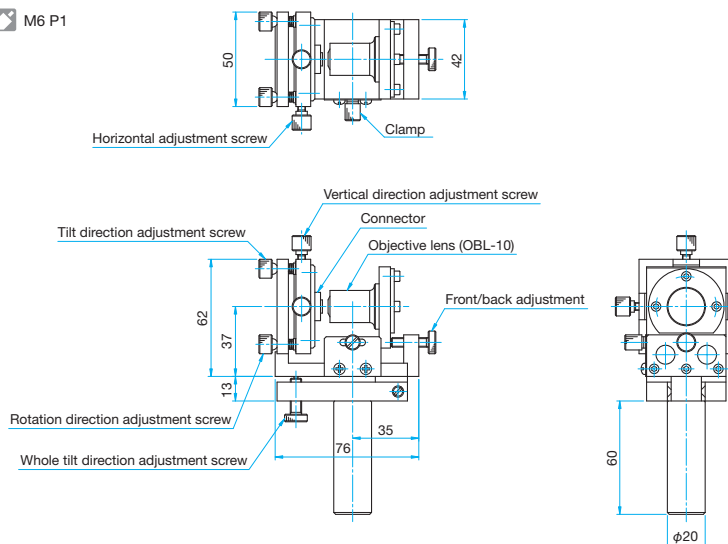
$$D = 2 \times NA \times f$$
 f: Focal length of objective lens, NA: Numerical aperture of fiber



Outline Drawing

FOPT

M6 P1



Specifications

Part Number	Compatible Connector	Focal length Objectives Lens [mm]	Centering Adjustment Range [mm]	Focus Adjustment Range [mm]	Fiber Adjustment Range Tilt-Rotation [°]	Holder Adjustment Range Tilt [°]	Centering Adjustment Resolution [mm/rotation]	Fiber Adjustment Resolution Tilt [°/rotation]	Fiber Adjustment Resolution Rotation [°/rotation]	Holder Adjustment Resolution Tilt [°/rotation]	Weight [kg]	Primary material: Aluminum
												Finish: Black Anodized
FOPT-FC	FC	16.6	±1	±5	±2	±2.5	0.5	about 0.7	about 0.7	about 0.53	0.55	
FOPT-SMA	SMA	16.6	±1	±5	±2	±2.5	0.5	about 0.7	about 0.7	about 0.53	0.55	