

Multi-Mode Fiber Optic Collimators

(Part Numbers: FOC-XXX-XXX-X)

PRODUCT DESCRIPTION

FEATURES

- ◆ BK7 lens, 350nm to 2000nm
- ◆ UV fused silica, 185nm to 2100nm
- ◆ Adjustable focus
- ◆ Stainless steel construction
- ◆ Multiple mounting features for lab and OEM applications
- ◆ SMA fiber connector

APPLICATIONS

- ◆ Coupling light into multi-mode fibers
- ◆ Collimating light from multi-mode fibers
- ◆ Spectroscopy

Fiber optic collimators are used to either coupling light from free space into an optical fiber or collimating light from a fiber to form a collimated (parallel) optical beam. Fiber collimators are key components with numerous applications. For example, in spectroscopy, a fiber collimator can collect light in a narrow field of view into a fiber which is in turn connected to a spectrometer. In another example one fiber collimator is connected to a light source and the collimated beam passes through a cuvette. On the other side of cuvette a second fiber collimator collects light and sends it to the spectrometer.

To maximize transmission wavelength range Mightex fiber collimators feature a single BK7 lens without optical coating. In the UV collimators, a UV fused silica lens is used instead. The collimators have a stainless housing for maximum durability. Fiber patchcords with fiber core diameter of up to 1500μm can be connected to the fiber collimator through the SMA connector. The M12x0.5 external thread or the Φ13mm barrel can be used to mount the fiber collimators in a system setup.

The full field of view (FOV) or full divergence angle can be calculated as $FOV = 2\arctan(D/2f)$ where D is the fiber core diameter and f is the focal length of the lens. Alternatively, the linear field of view on an object placed a distance L away from the collimator is $D(L/f)$.

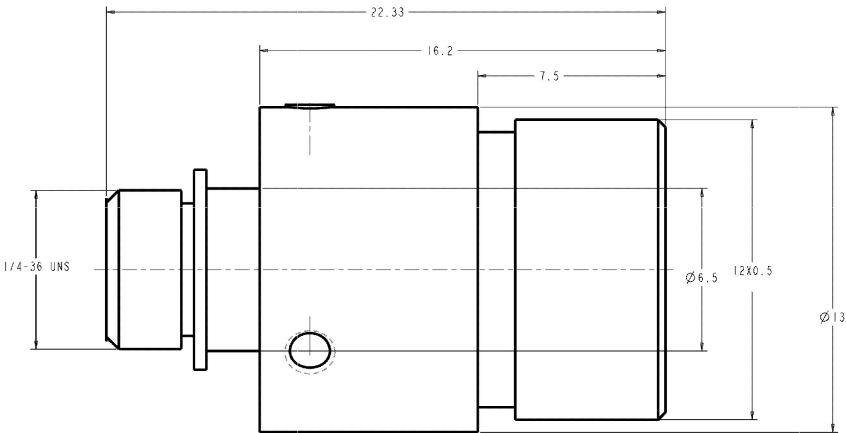


Fiber patch cord not included

PERFORMANCE SPECIFICATIONS

Part Number	Focal Length (mm)	Clear Aperture (mm)	F# / NA	Lens Material	Wavelength Range	Connector
FOC-010-006-V	10	6	1.7/0.29	BK7	350-2000nm	SMA
FOC-010-006-U	10	6	1.7/0.29	UV fused silica	185-2100nm	SMA

INSTALLATION DRAWING





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PART NUMBER AND ORDERING INFORMATION

FOC - - -

Focal Length
Clear Aperture
Wavelength

For example, FOC-010-060-V has a focal length of 10mm, clear aperture diameter of 6mm, and a visible/NIR transmission range (350nm-2000nm).

With a world-class OEM design team, Mightex offers a broad range of customized solutions in order to meet individual customer's unique requirements. Please call 1-416-840 4991 or email sales@mightex.com for details.