

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 1500 μ m can be connected to the fiber collimator through the SMA connector. The M12x0.5 external thread or the Φ 13mm 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 $FOV = 2\text{atan}(D/2f)$ 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 $D(L/f)$.

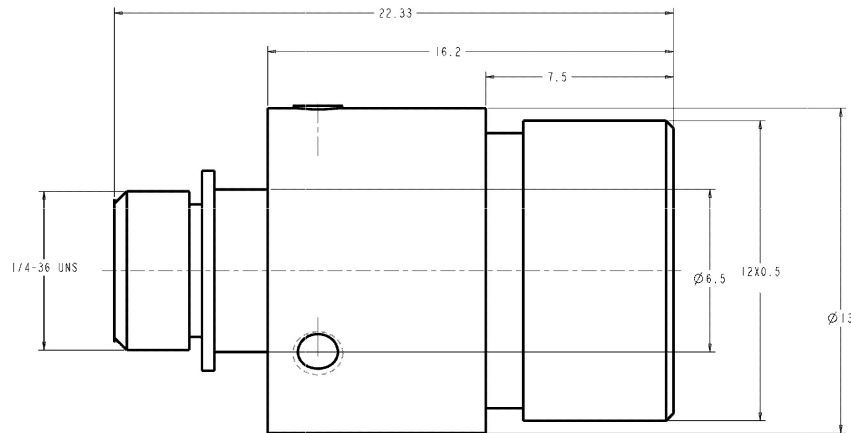


Fiber patch cord not included

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

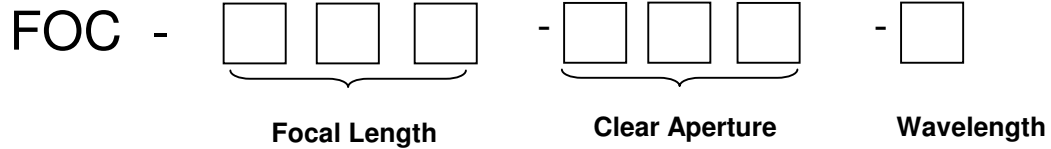
INSTALLATION DRAWING



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PART NUMBER AND ORDERING INFORMATION



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.