

FC3

Adjustable Fiber Collimator



Features

- Adjustable focus
- Clean Gaussian beam at any distance
- Low wavefront error
- Very high transmission
- 350nm to 1700nm

Applications

- Cytometry
- Microscopy
- Analytical instrumentation
- Quantum optics

The FC3 Adjustable Fiber Collimators are designed to provide a diffraction limited highly collimated beam from single-mode type fibers. These are high performance fiber collimators with low wavefront error,

Due to the many wavelengths of diode lasers and other new types of lasers, an adjustable focus is provided. This allows you to adjust for your wavelength with it's fine 80 pitch adjustment and lock it down.

Beam size for singlemode fiber is approximately 1mm at $1/e^2$ points. For multimode fibers the beam is about 3.5mm at the exit aperture for 100 μ m core fiber.

The FC3 Fiber Collimators also provides high transmission at any wavelength. The air spaced design allows for high power application as there is no epoxy in the optical path. There is also no or hardly any fluoresce when using UV lasers or other wavelength lasers in the spectrum that may cause false readings in your application.

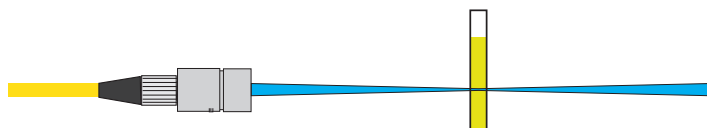
Back end of the collimator has an FC or FC/APC receptacle. The FC5 ring adapter can be used to mount the FC3 onto common 1" optical mounts.

Besides collimation, you can also adjust the fiber collimator to focus to a tight spot and have a long depth of focus.

FC3 Adjustable Fiber Collimator

Specifications (using singlemode fiber)

	FC3
Aperture:	3.5 mm
Beam size*:	~1 mm
Beam divergence:	< 1 mrad
Wavefront error over $1/e^2$ points rms:	< 1/10 wave
Receptacle:	FC or FC/APC
Adjustable focus:	80 tpi adjustment
Locking:	yes
Housing material:	Stainless steel
Weight:	12 g (0.4 oz.)

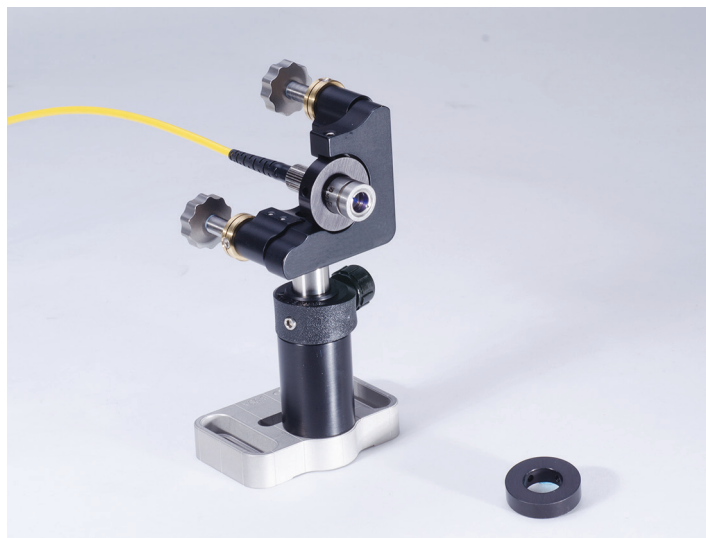


FC3 at 635nm that is focused to ~ 90 μm spot at 100 mm distance with long depth of focus.

Ordering Information

Model #	Description
FC3- λ -FC	Yields ~1 mm beam. FC receptacle
FC3- λ -APC	Yields ~1 mm beam. FC/APC receptacle
Accessories	
FC5R-1.0	FC3 and FC5 ring adapter for 1 in. optical mounts

Use -VIS1 for any $\lambda = 350 \text{ nm}$ to 600 nm
Use -NIR1 for any $\lambda = 600 \text{ nm}$ to 1000 nm
Use -NIR2 for any $\lambda = 1000 \text{ nm}$ to 1700 nm



FC5 Ring Adapter for FC3 Fiber Collimator

Specifications subject to change without notice.