

Small Fiber Collimators



Features

- Small outer diameter housing
- Long working distance
- 450nm to 1550nm
- High temperature versions

Applications

- Sensors
- Probes
- Life sciences

For many applications, tight confined spaces require miniaturized solutions. We have designed some very small collimators with large working distances. Wavelengths range from 405nm to 1550nm.

These collimators do not use graded index lenses as those are not suitable for wavelengths under 600nm. Also most graded index lens collimators have very small working distances of a few millimeters and very large beam divergence.

Our small fiber collimators have a slightly larger beam of about 0.8mm and low beam divergence which makes the working distance very large, like a meter or more.

High precision components are used to manufacture small collimators at diode laser wavelengths. Housing material is stainless steel for thermal stability.

Standard fiber connectors are FC/UPC or FC/APC. Special

terminations can be made on the connector end.

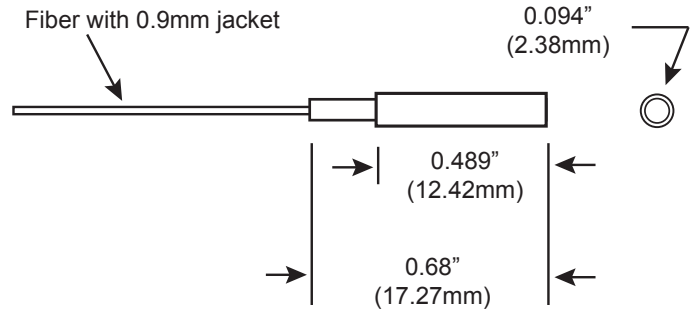
Environmental concerns can also be addressed on a semi custom basis, such as for high temperature versions.

Small Collimators

Specifications

2.4mm O.D. Small Collimator	
Aperture:	1.6 mm
Beam size:	~ 0.8 mm
Beam divergence:	~1 mrad
Outer housing dimensions:	Φ2.38 mm x 17 mm L
Housing material:	Stainless steel
Fiber:	Singlemode or PM
Fiber jacket:	900 μm Hytrel
Fiber length:	1 meter
Fiber termination:	FC/UPC or FC/APC

Dimensions



Ordering Information

2.4mm O.D. Small Collimator

Model # (Singlemode fiber)	Model # (Polarization fiber)	Description
Fiber terminated with FC/UPC		
FCX2-450-FC	FCX2-450-FCPM	$\lambda = 450\text{nm}$
FCX2-488-FC	FCX2-488-FCPM	$\lambda = 488\text{nm}$
FCX2-520-FC	FCX2-520-FCPM	$\lambda = 520\text{nm}$
FCX2-640-FC	FCX2-640-FCPM	$\lambda = 640\text{nm}$
FCX2-830-FC	FCX2-830-FCPM	$\lambda = 830\text{nm}$
FCX2-850-FC	FCX2-850-FCPM	$\lambda = 850\text{nm}$
FCX2-1064-FC	FCX2-1064-FCPM	$\lambda = 1064\text{nm}$
Fiber terminated with FC/APC		
FCX2-450-APC	FCX2-450-APM	$\lambda = 450\text{nm}$
FCX2-488-APC	FCX2-520-APM	$\lambda = 488\text{nm}$
FCX2-520-APC	FCX2-520-APM	$\lambda = 520\text{nm}$
FCX2-640-APC	FCX2-640-APM	$\lambda = 640\text{nm}$
FCX2-830-APC	FCX2-830-APM	$\lambda = 830\text{nm}$
FCX2-850-APC	FCX2-850-APM	$\lambda = 850\text{nm}$
FCX2-1064-APC	FCX2-1064-APM	$\lambda = 1064\text{nm}$

- Please call or email for other wavelengths.
- High temperature versions also available.
- Polarizers, focusing lenses and beam bending optics can also be integrated in to the assembly.

All collimators are manufactured in California, USA.

Specifications subject to change without notice.