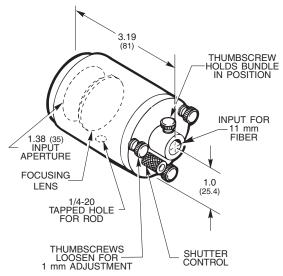
Fiber Bundle Focusing Assemblies for Oriel Light Sources



- Aspheric lens to achieve high coupling efficiency
- · Focusing collimated light into a fiber bundle

Fiber Bundle Focusing Assembly

These assemblies, plus a fiber, convert a collimated light source into a fiber optic source. All the components necessary to image a source onto the face of a glass or fused silica bundle are contained in a single enclosure - focusing lens, manual shutter and a fiber bundle holder. One end of the housing has a male flange to couple to an Oriel light source condenser; the other end accepts fiber bundles with an 11 mm ferrule, or single fibers with appropriate connector.

We offer two models of fiber focusing assemblies; both use an aspheric lens. Aspheric lenses almost completely eliminate spherical and chromatic aberrations ensuring a very tightly focused spot and greater throughput than conventional plano convex lenses. Choose the 77799 Assembly for glass fiber bundles and liquid light guides, and choose the 77776 Assembly for fused silica fiber bundles and single core fibers.

Ordering Information

Fiber Bundle Focusing Assemblies

Flange Series Size	F/#	Lens Material	Typical Spot Size*	Model	
1.5 Inch	F/0.85	Glass Aspheric	4 mm	77799	
	F/2.2	Fused Silica Aspheric	800 μm	77776	
	F/2.2	Fused Silica Aspheric (without fiber optic holder)	800 μm	77777	

^{*} The source was a 75 W Xe arc lamp with a 0.25 x 0.5 mm arc size, collimated by an F/1.5 condenser, and re-imaged using the listed lenses. By comparison, the typical spot size for a plano convex lens assembly (using the same arc lamp), is 5 mm.

Accessories

Model	Description
77670	SMA to 11 mm Ferrule Converter (Changes an SMA termination to an 11 mm standard ferrule) Holds SMA Fibers in the 77776 Assembly (We do not recommend the 77799 for single core fibers)
77675	ST to 11 mm Ferrule Converter (Changes an ST termination to an 11 mm standard ferrule) Holds ST Fibers in the 77776 Assembly (We do not recommend the 77799 for single core fibers)

