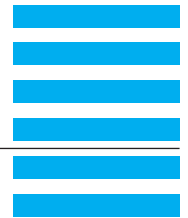
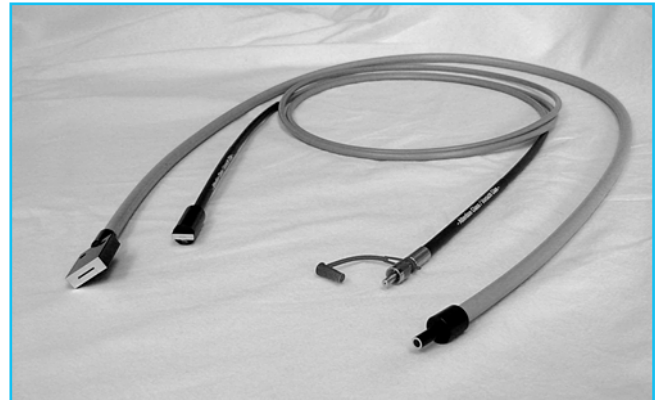


Fiber Bundles – Circular to Rectangular



- mainly for use with monochromators and spectrographs
- optimized solutions for PDA's and CCD's

Circular to rectangular fiber bundles are mainly used with monochromators and spectrographs. The rectangular end can replace the in- and output slit of a monochromator or spectrograph. We provide optimized slit geometry for both the input to spectrographs with PDA's or CCD's and the output slit of monochromators.



F/Number Matching

When these fibers are used as input devices to a monochromator, the cone of light from the fiber bundle, particularly glass bundles, may be too large and overfill the input optics leading to loss of efficiency and high stray light. Imaging, as with one or two lenses may improve efficiency.

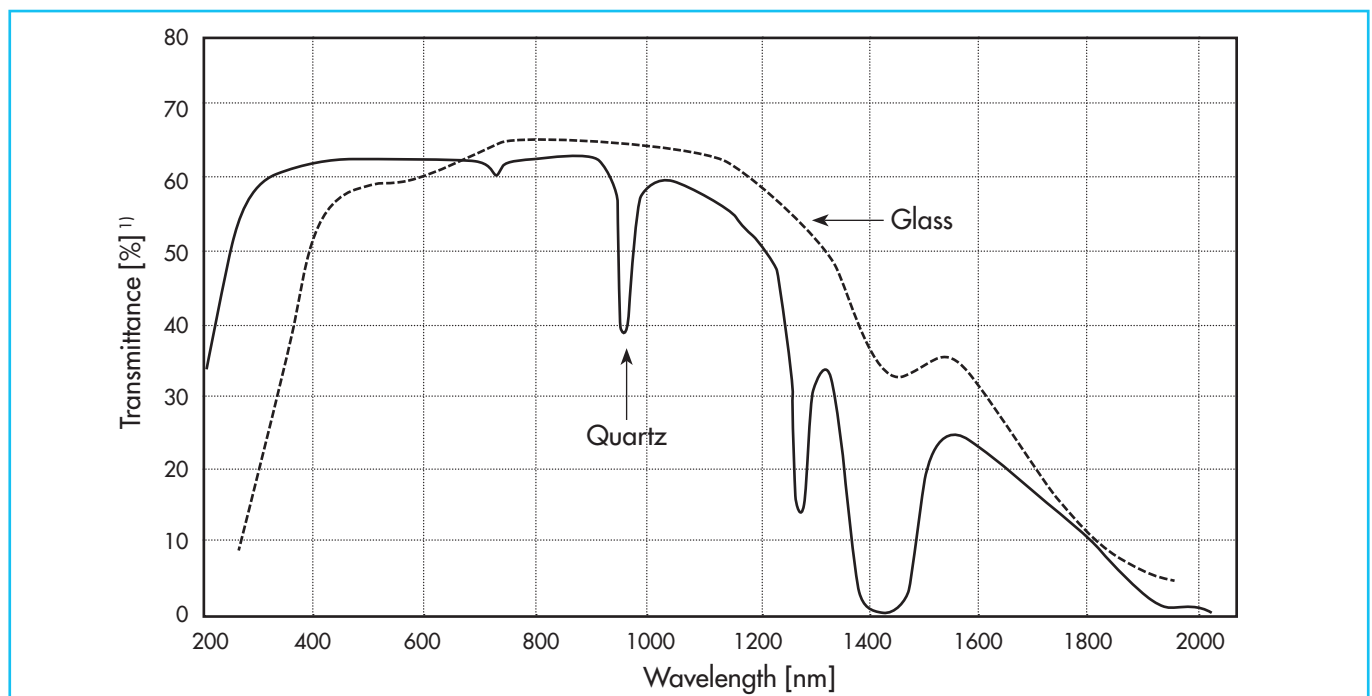
In most of the applications we have seen the convenience of these fiber bundles outweighed any loss in efficiency due to non matching the monochromator's F/number.

When they operate as monochromator output devices the fiber bundles accept all the emergent beam within

the slit like aperture because the acceptance angle of the fiber bundles is greater than the output angle of the light from monochromators. This is very efficient for getting the total monochromator output into the fiber bundle.

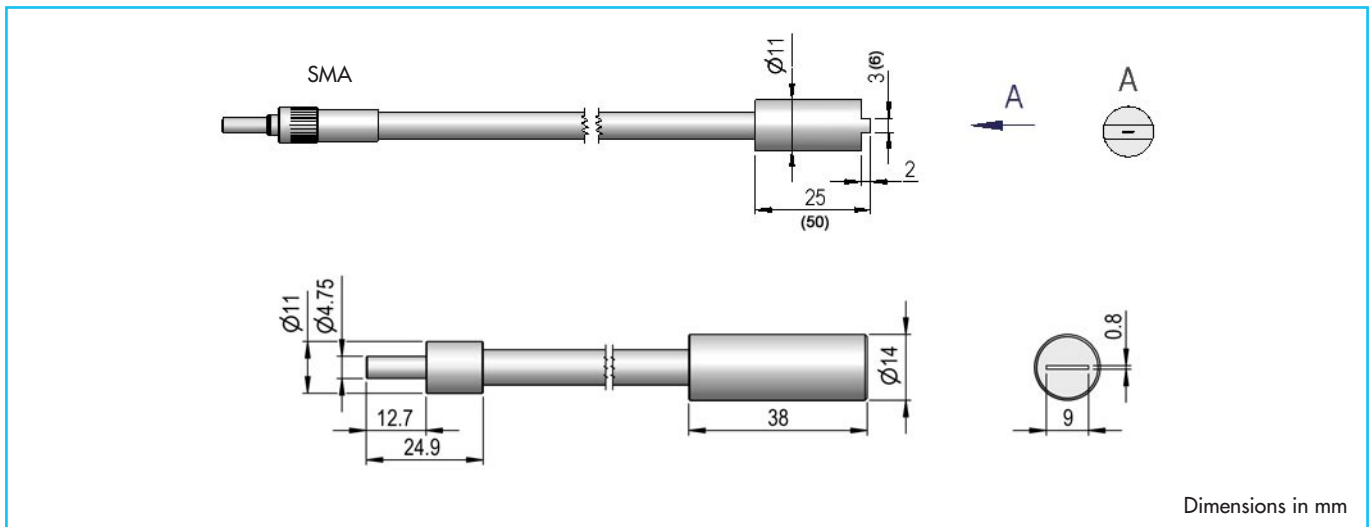
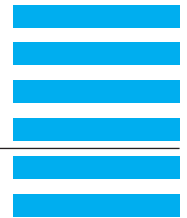
We offer three different types of standard slit geometries: a slit height of 2,5 mm matches the height of many PDA-detectors, a 6 mm slit height matches the height of most CCD's, a 9 mm slit height is used for monochromators.

For monochromators we offer bundles with individual slit sizes for best match to your application.



¹⁾ Length: 2 m

Fiber Bundles – Circular to Rectangular



Ordering Information

	Material	Circular End Termination	Circular Bundle Diameter [mm]	Slit Size W x H	Length ²⁾ [m]	NA	Acceptance Cone [°]
LLB518	UV-Quartz	SMA ¹⁾	0,5	100 µm x 1,8 mm	1	0,22	25
LLB525	UV-Quartz	SMA ¹⁾	0,6	100 µm x 2,5 mm	1	0,22	25
LLB531	UV-Quartz	SMA ¹⁾	0,6	100 µm x 3,1 mm	1	0,22	25
LLB552	UV-Quartz	SMA ¹⁾	0,8	100 µm x 5,2 mm	1	0,22	25
LLB560	UV-Quartz	SMA ¹⁾	1,2	200 µm x 6 mm	1	0,22	25
LLB592	UV-Quartz	Sleeve	3,0	0,8 mm x 9,0 mm	1	0,22	25
LLB593	Glass	Sleeve	3,0	0,8 mm x 9,0 mm	1	0,56	68

¹⁾ also available with ST or FC termination

²⁾ lengths up to 10 m available