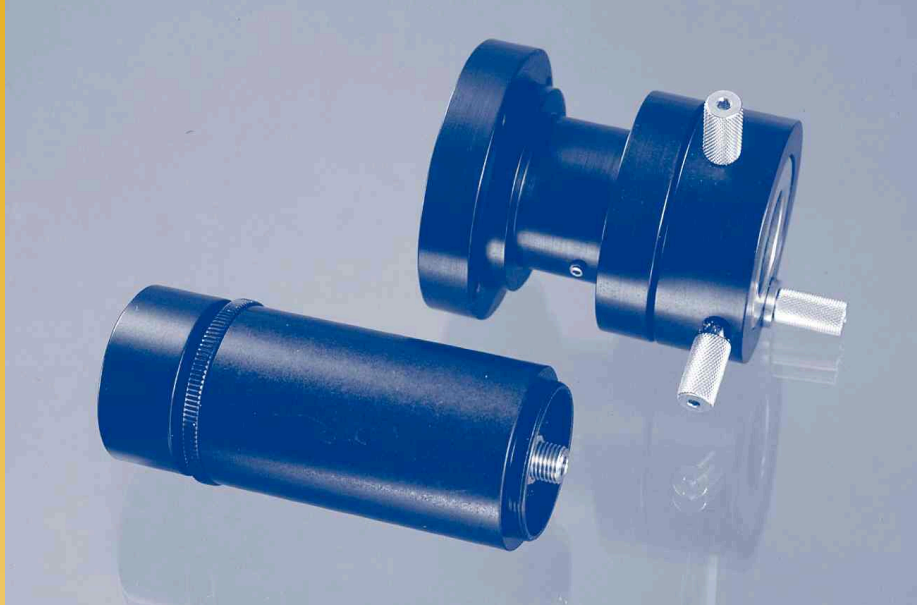


Laser to Fiber Couplers



DESCRIPTION

RoMack's laser to fiber couplers are rugged and functional devices that make coupling of laser beams and other low divergence sources into fiber optics easy.

Some couplers allow no adjustment at all while some provide 3 axis adjustment. The simplest version of an adjustable coupler provides adjustment in the Z axis, or beam axis, only, such that the fiber face can be moved through the focal point. A nice feature of the coupler is that it can be locked in place once coupling has been optimized so it will not drift out of position. These couplers are typically used in OEM, Industrial or Military applications once the details of the

system have been worked out and mounting and dimensional tolerances have been accounted for.

The 3 axis adjusting option allows for adjustment along the beam axis (Z axis) through the focal point, as well as fine adjustment in the plane perpendicular to the beam axis (the X and Y axis). The XYZ adjusting coupler also provides a locking screw so the unit can be set in a position once it has been optimized. These couplers are very useful in the laboratory or in the R&D environment where more freedom for adjustment is required.

All couplers are available with BK-7 or Silica optics and these can be AR coated if

APPLICATIONS

- Laser to fiber coupling
- Medical
- Industrial
- Military
- Research
- Fiberoptic output collimating

FEATURES

- Couples a collimated beam into a fiberoptic.
- Z axis and XYZ axis adjustments available.
- Can be locked in position.
- Barrel mount, thread mount and flange mount options.
- Couples up to 20mm diameter beams.
- Fiber Numerical Apertures up to 0.39.
- Fiber diameters from single mode to 1000 μ m.
- UV, VIS and NIR wavelengths.

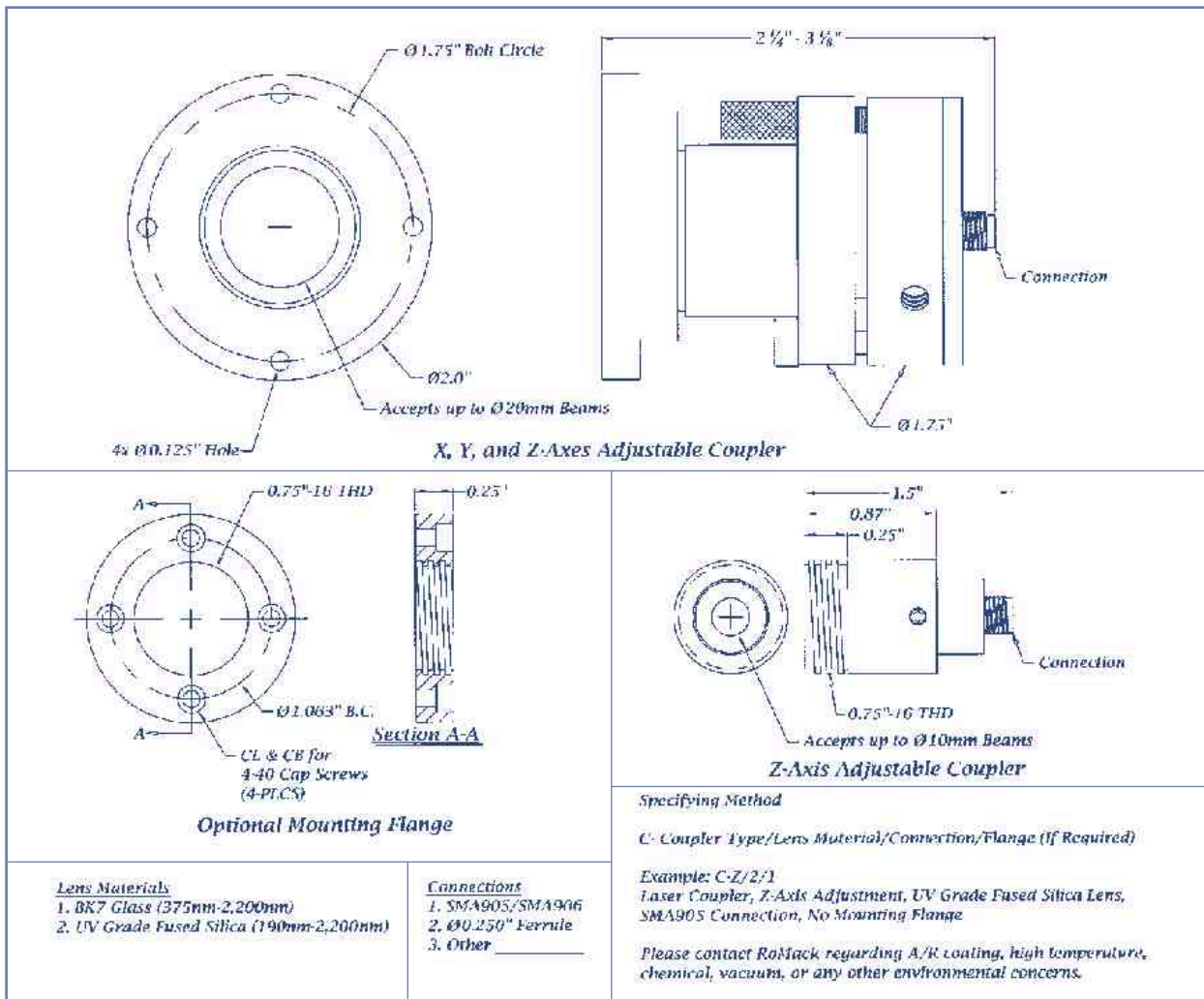
desired. These couplers may be used in reverse, as fiberoptic output collimators. The degree of collimation will depend upon the fiber size and the fiber NA. See RoMack's fiberoptic collimators and focusing devices.

Laser to Fiber Couplers

ORDERING/SPECIFYING INFORMATION

Some of the standard types of couplers are shown in the data sheet but please keep in mind that RoMack can provide almost any type of custom coupler as well. **If you don't see what you require please give RoMack a call and one of our application specialists will help you.**

- Z axis adjustment:**
 All RoMack Couplers exhibit at least +/-3mm of Z-axis adjustment on either side of the focal point.
- Connector Compatibility:**
 SMA adapters are standard, but adapters for ferrules or other connectors are available.
- Input Beam Diameters:**
 CZ001 accepts beams up to 10mm in diameter; CXYZ003 accepts beams up to 20mm in diameter.
- Numerical Aperture:**
 ≤ 0.39 .
- Mounting:**
 If desired, the optional mounting flange should be ordered. Or, if another mounting scheme is desired please call RoMack.



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