FIBER OPTIC COMPONENTS



PRECISION GLASS FIBER OPTIC COMPONENTS

Accu-Glass manufactures glass ferrules, collimator tubes and various types of spacers for the telecommunication and photonics markets.

An important feature of fiber optic components is their dimensional accuracy to support a minimal dB loss.

Whether a single fiber is terminated at a device or joined to another fiber, precision ferrules with ID tolerances as small as ±1 micron are used to provide optimal alignment. Lead-in and stress-relief is provided with an available funnel-forming process which prevents point-loading of the fiber as it is inserted into the ferrule and reduces field failure after assembly.

Low and mid-range expansion borosilicate glasses are the ideal materials for superior polishing and for UV adhesive curing in OEM and field applications.



In creating a splice or termination, the fiber is affixed to the ferrule.

The fiber and ferrule are then polished concurrently so that the fiber and ferrule ends are on the same plane. An advantage of borosilicate glass over a ceramic is that it polishes uniformly with the optical fiber. A uniform polish minimizes the dB loss that might otherwise occur with a harder ceramic that polishes at a different rate than the optical fiber.

In field assembly applications, glass permits UV curing which eliminates the need for mechanical connectors.

Glass ferrules are used in single and multimode optical fiber assemblies.

Custom inside diameter, outside diameter, length and funnel options are available.