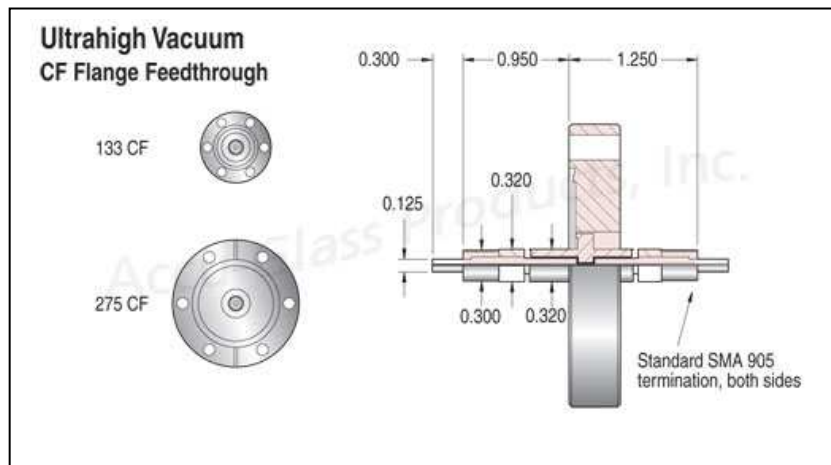


## Fiber optic feedthroughs

are constructed with 62.5, 100, 200, 400, 600, and 1000 micron UV/VIS or VIS/NIR multimode fibers. They are designed for vacuum applications requiring fibre optic connections from inside a vacuum system to external equipment. The fiber is hermetically sealed into a stainless steel shell, using the latest in glass-ceramic bonding technology, and terminates on the vacuum and air side with standard SMA 905 terminations.

Ultrahigh vacuum cable, polyimide buffered 200, 400, and 600µm optical fibers are available to meet the demands of ultrahigh vacuum environments. 1000µm vacuum fibre optic cable has an aluminum buffer.

All Products' optical fiber is constructed as a core-and-cladding composite. The core, or the filament that guides the light, consists of a thin strand of high-transmission fused silica. The cladding consists of an outer layer of doped, lower-refractive-index fused silica. This two-layer design tightly confines the light to the central core of the fiber which in turn delivers a maximum amount of light at the far end. The fiber diameter is closely controlled during the drawing process. This allows the fiber to center well in connectors. A low loss rate is the result.



Dimensions in inch.

### Specification:

Bare fiber: Pure fused-silica core, fluorine-doped silica cladding and polyimide coating

Fiber profile: Step-index multimode

Numerical aperture:  $0.22 \pm 0.02$  or  $24,8^\circ$

Core-to-cladding  
ratio core dia  $\geq 200\mu\text{m}$ : 1 : 1.1

Bend radius

|           |                     |
|-----------|---------------------|
| Momentary | 200 x core diameter |
| Long-term | 400 x core diameter |

# VACUUM TECHNOLOGY Hositrade

## Feedthroughs and Accessories for Vacuum



Multimode, Step-Index (UV/VIS) Feedthroughs and Accessories

Multimode, Step-Index (VIS/NIR) Feedthroughs and Accessories

Multimode, Graded-Index (UV & IR) Feedthroughs and Accessories

**Connector to Connector Cable** VIS/NIR assemblies are fitted with premium SMA 905 connectors on both ends of a non-jacketed fiber optic fiber.

**Connector to Cable** VIS/NIR assemblies are fitted with a premium SMA 905 connector on one end of a non-jacketed fiber optic fiber and bare polished fiber on the other.

**Special Note:** In-Vacuum cables require a coupler to mate with corresponding feedthroughs