

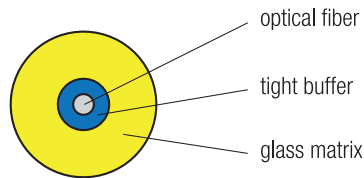
Fiber Rod

AFL's Fiber Rod takes an optical fiber of the customer's choice and encases it in a glass re-reinforced matrix. The diameter of the structure is adjusted to provide the characteristics needed for the specific application. The performance of the optical fiber is retained in this structure providing for a very ruggedized fiber suitable for many harsh applications. Fiber Rod is best suited for high tensile or compressive requirements where the glass structure provides the rigidity to protect the optical fiber from harm. Additionally, AFL's Fiber Rod does not exhibit the typical curvature coming off the payoff reel like that of most cables. This makes deployments in applications such as pipelines and oil wells simpler. Applications such as strain sensing and temperature sensing in a host of environments up to 200°C are ideal for this product.

Features/Options

- **Strength** – Variable as glass matrix diameter can be increased which increases strength
- **Bend Diameter** – 50x the outer diameter
- **Temperature Performance** – Standard is 85°C
- **Ruggedized Option** – Product can be jacketed with various polymers such as PVDF, Hytrel, Polyethylene, Nylon, PVC, Fire Retardant PE, Polyurethane and others
- Available in lengths of up to 6 kilometers

Cable Components



Specifications

PARAMETER	VALUE		
	OD (mm)	ID (mm)	TOLERANCE (+/-mm)
85°C Version			
Optical Fiber	0.125	n/a	0.001
Coating (Silicone PFA)	0.700	0.125	0.100