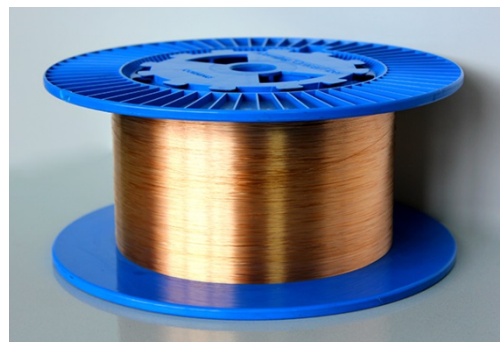


SPECIALTY FIBER COPPER COATED FIBERS

MULTY MODE SILICA FIBERS

Hermetically sealed Copper-coated multy mode optical fibers have all the benefits of silica-silica fibers. Additional significant improvements include increased mechanical strength and greater fatigue resistance compared to non-hermetic and polymer-clad fibers (PCS). Their transmittance covers a spectral range of 200 to 2400 nm, and also remains stable in corrosive chemicals that normally react to silica glass. The temperature range is from -196°C to +600°C . Hermetically metal-coated optical fibers are the optimum candidate when used in high vacuum and harsh environmental conditions



FEUTURES:

- ❖ Greatly enhanced resistance to high power laser radiation.
- ❖ Higher core-to-clad ratio and enlarged NA optimized for coupling to high-energy lasers.
- ❖ Better fiber cooling due to the heat-conducting metal coating.
- ❖ Excellent mechanical strength and flexibility compared to polymer coated fibers.
- ❖ Capability to feed the fibers into a high vacuum: the metal coating can be soldered and will not outgas.

FIBER SPECIFICATIONS	OK-XXX/XXXCu	OKM-XXX/XXXCu
Material of hermetic protective coating (Coating material)	Copper/copper alloy	
Core material	pure synthetic silica (low OH)	pure synthetic silica (high OH)
Clad material	doped silica	
Clad/core ratios	1.06; 1.1	
Numerical Aperture (NA)	0.22 ± 0.02 (another on request)	
Minimal bend radius	60 times the fiber radius	
Long-term bending radius	120 times the fiber diameters	
Material of additional polymer jacket	on request	
Coating thickness, µm	15 to 150	
Proof test, kpsi	> 100	
Fiber diameter, µm	50 to 400	
Min operating temperature, °C	- 196	
Max operating temperature, °C	+ 600	

Other parameters are available on the request