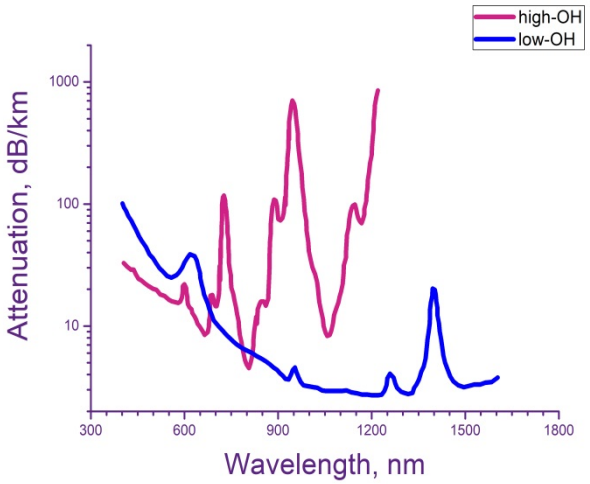
SPECIALTY FIBER ALUMINIUM COATED FIBERS

LOW OH
MULTY MODE SILICA FIBERS

Hermetically sealed Aluminum-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 +400°C. Hermetically metal-coated optical fibers are the optimum candidate when used in high vacuum and harsh environmental conditions



FEATURES:

- 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/XXXAL	
Coating material	Aluminium	
Standard Core/Clad diameters, μm	100/110, 150/165, 200/220, 300/330	400/440, 600/636, 600/660, 800/848, 800/880, 1000/1060, 1000/1100
Attenuation at 800/1300 nm (See grapf SWU)	the loss spectrum in the long wavelength region (> 1um) is higher than that of the material	the loss spectrum is close to the material loss spectrum
Core material	Pure syntetic silica (low OH)	
Clad material	doped silica	
Numerical Aperture (NA)	0.22 ± 0.02 (another on request)	
Short-term bending radius	60 times the fiber diameters	
Long-term bending radius	120 times the fiber diameters	
Proof test, kpsi	> 100	
Min operating temperature, ·C	-196	
Max operating temperature, ·C	+400	

Other parameters are available on the request