

SPECIALTY FIBER ALUMINUM COATED FIBERS

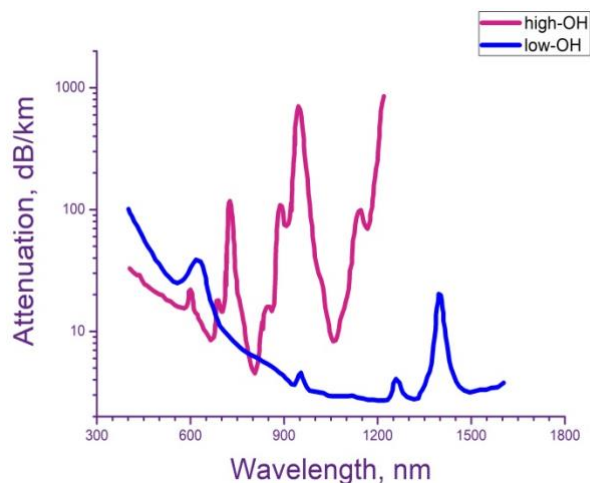
LOW OH STEP INDEX MULTIMODE SILICA FIBERS

1.06 CORE/CLAD RATIO

Aluminum-coated step index multimode 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 400 to 2200 nm, and also remains stable in corrosive chemicals that normally react to silica glass. The temperature range is from -196C to +400C .

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.
- ❖ The metal coating can be soldered and will not outgas.



FIBER SPECIFICATIONS	OK-600/636AL	OK-800/848AL	OK-1000/1060AL
Core diameter, μm	600 \pm 12	800 \pm 15	1000 \pm 20
Clad diameter*, μm	636 \pm 15	848 \pm 20	1060 \pm 40
Coating diameter, μm	830 \pm 30	1060 \pm 40	1350 \pm 60
Attenuation at 800/1300nm (see graph Low OH)	The loss spectrum is close to the material loss spectrum		
Wavelength range, nm (see graph Low OH)	400 \div 2200		
Fiber type	Multimode		
Index profile	Step		
Coating material	Aluminium		
Core material	Pure syntetic silica (low OH)		
Clad material	Doped silica		
Numerical Aperture (NA)	0.22 \pm 0.02		
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, $^{\circ}\text{C}$	-196		
Max operating temperature, $^{\circ}\text{C}$	+400		

Other parameters are available on the request