

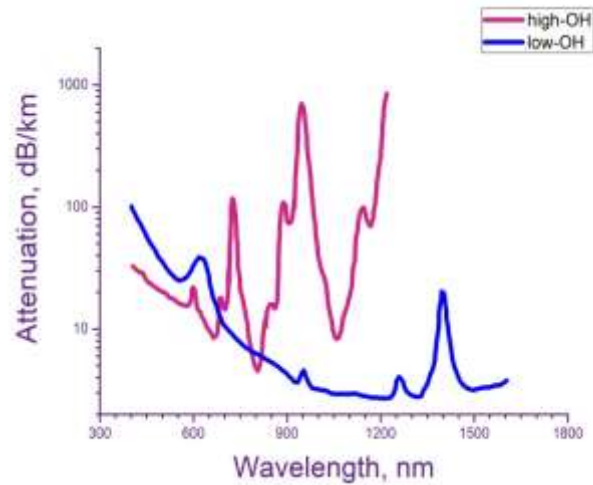
# SPECIALTY FIBER ALUMINUM COATED FIBERS

## LOW OH STEP INDEX MULTIMODE SILICA FIBERS

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 2400 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-100/110AL	OK-150/165AL	OK-200/220AL	OK-300/330AL	OK-400/440AL	OK-600/660AL	OK-800/880AL	OK-1000/1100AL
Core diameter, μm	100 ± 2	150 ± 3	200 ± 4	300 ± 6	400 ± 8	600 ± 12	800 ± 15	1000 ± 20
Clad diameter*, μm	110 ± 3	165 ± 4	220 ± 5	330 ± 10	440 ± 12	660 ± 15	880 ± 20	1100 ± 40
Coating diameter, μm	140 ± 8 (150 ± 8)	210 ± 12	300 ± 15	450 ± 25	565 ± 25	860 ± 30	1110 ± 40	1410 ± 60
Attenuation at 800/1300nm (see graph Low OH)	The loss spectrum in the long wavelength region (>1 μm) is higher than that of the material				The loss spectrum is close to the material loss spectrum			
Wavelength range, nm (see graph Low OH)	400 ÷ 1100		400 ÷ 1700			400 ÷ 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 ± 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, °C	-196							
Max operating temperature, °C	+400							

\*The core/clad ratios 1.06/1.1 on the request  
Other parameters are available on the request