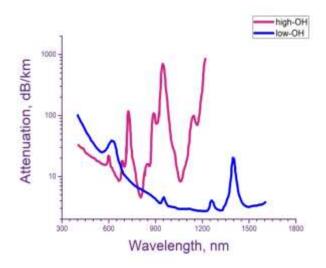
# SPECIALTY FIBER ALUMINUM COATED FIBERS

## LOW OH STEP INDEX MULTIMODE SILICA FIBERS

## **1.1 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	0K- 100/110AL	OK- 150/165AL	0K- 200/220AL	0K- 300/330AL	0K- 400/440AL	0K- 600/660AL	0K- 800/880AL	0K- 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 grapf 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 grapf 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							

#### Other parameters are available on the request