# SPECIALTY FIBER ALUMINUM COATED FIBERS

**HIGH 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 250 to 1200 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.
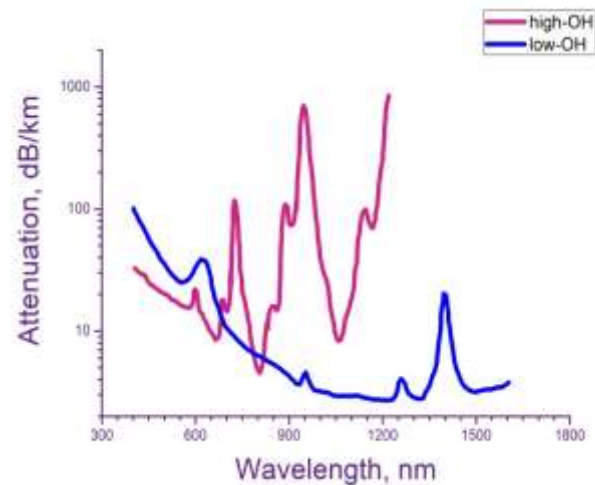
FIBER SPECIFICATIONS	OKM-100/110AL	OKM-150/165AL	OKM-200/220AL	OKM-300/330AL	OKM-400/440AL	OKM-600/660AL	OKM-800/880AL	OKM-1000/1100AL
Core diameter, μm	100 ± 2	150 ± 3	200 ± 4	300 ± 6	400 ± 8	600 ± 12	800 ± 15	1000 ± 20
Clad diameter*, μm	110 ± 3	165 ± 4	220 ± 5	330 ± 10	440 ± 12	660 ± 15	880 ± 20	1100 ± 40
Coating diameter, μm	150 ± 8	210 ± 12	300 ± 15	450 ± 25	565 ± 25	860 ± 30	1110 ± 40	1410 ± 60
Attenuation at 800/1300nm (see grapf High 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 High OH)	250 ÷ 1100				250 ÷ 1200			
Fiber type	Multimode							
Index profile	Step							
Coating material	Aluminium							
Core material	Pure syntetic silica (High 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, ºC	-196							
Max operating temperature, ºC	400							

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