

# SPECIALTY FIBER ALUMINUM COATED FIBERS

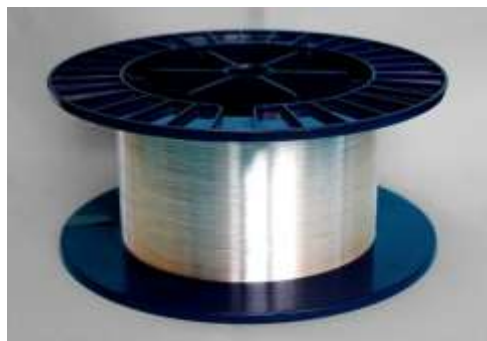
SINGLE MODE

**Kokyo**

株式会社 光響

Email : [info@symphotony.com](mailto:info@symphotony.com)  
Web : <https://www.symphotony.com/>

Aluminum-coated single mode optical fibers have all the benefits of optical fibers include increased mechanical strength and greater fatigue resistance compared to non-hermetic and polymer-clad fibers (PCS). Their transmittance covers a spectral range of 1500 to 1600 nm, and also remains stable in corrosive chemicals that normally react to silica glass.



## FEATURES:

- ❖ Excellent mechanical strength and flexibility compared to polymer coated fibers.
- ❖ The temperature range is from -196°C to +400°C.
- ❖ The metal coating can be soldered and will not outgas.

FIBER SPECIFICATIONS	OK-6/125AL	OK-9/125AL
Fiber type	Single mode	Single mode
Coating material	Aluminium	Aluminium
Core diameter, $\mu\text{m}$	$6.8 \pm 0.5$	$9.1 \pm 0.5$
Mode field diameter (Gauss), $\mu\text{m}$	$7.5 \pm 0.6$	$10.0 \pm 0.6$
Clad diameter, $\mu\text{m}$	$125 \pm 1$	$125 \pm 1$
Coating diameter, $\mu\text{m}$	$160 \pm 5$	$160 \pm 5$
Wavelength range, nm	1500 ÷ 1600	1500 ÷ 1600
Cutoff wavelength, nm	< 1450	< 1450
Attenuation at 1550nm <sup>1</sup> , dB/km	< 7	< 7
Core material	Silica Ge-doped	Silica Ge-doped
Clad material	silica	silica
Numerical Aperture (NA)	$0.16 \pm 0.02$	$0.13 \pm 0.02$
$\Delta n$	$0.009 \pm 0.001$	$0.005 \pm 0.001$
Short-term bending radius, mm	$\geq 10$	$\geq 10$
Long-term bending radius, mm	$\geq 25$	$\geq 25$
Proof test, kpsi	> 100	> 100
Min operating temperature <sup>2</sup> , °C	- 196	- 196
Max operating temperature <sup>2</sup> , °C	400	400

1- under normal climatic conditions

2- in inert environment

Other parameters are available on the request