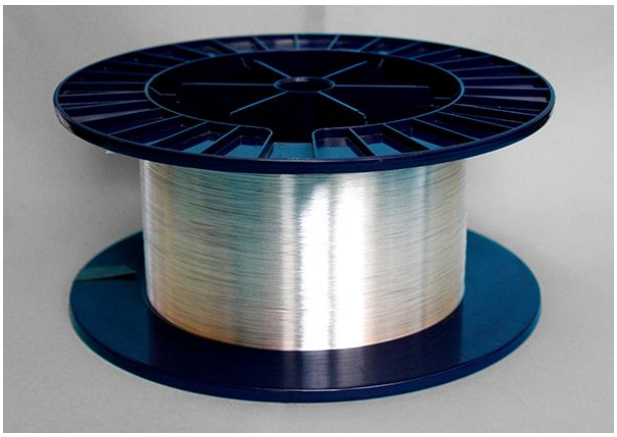
ALUMINUM-COATED SINGLE-MODE OPTICAL FIBERS

Description



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 -196C to +400C.
- The metal coating can be soldered.

Specifications

General Properties				
Core diameter, µm	**Clad diameter, µm**	**Coating diameter, µm**	**Cladding offset, %**	**Coating offset, %**
6.8 ± 0.5	125 ± 1	160 ± 5	< 2	< 5

Optical Properties					
Δ n	**Core material**	**Cutoff wavelength, nm**	**Wavelength range, nm**	**Mode field diameter (Gauss), µm**	**Attenuation at 1550 nm[1] C, dB/km**
0.009 ± 0.001	Silica Ge-doped	< 1450	1500 - 1600	7.5 ± 0.6	< 7.0

Operating conditions				
Proof test, kpsi	**Min operating temperature,[2,3] C**	**Max operating temperature,[2] C**	**Short-term bending radius, mm**	**Long-term bending radius, mm**
100	-196	400	≥ 10	≥ 25

1 - under normal climatic conditions
2 - in inert environment
3 - at the minimum operating temperature, the integrity of the optical fiber is guaranteed