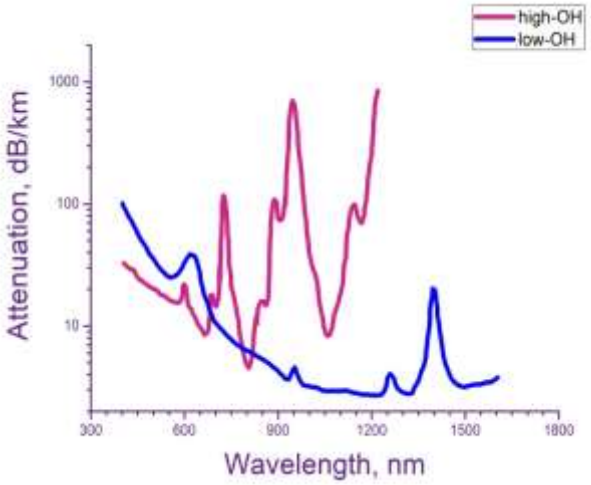
# SPECIALTY FIBER ALUMINUM COATED FIBERS

## LOW OH STEP INDEX MULTIMODE SILICA FIBERS

### 1.06 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 | OK-600/636AL | OK-800/848AL | OK-1000/1060AL |
|---|---|---|---|
| Core diameter, μm | 600 ± 12 | 800 ± 15 | 1000 ± 20 |
| Clad diameter*, μm | 636 ± 15 | 848 ± 20 | 1060 ± 40 |
| Coating diameter, μm | 830 ± 30 | 1060 ± 40 | 1350 ± 60 |
| Attenuation at 800/1300nm (see grapf Low OH) | The loss spectrum is close to the material loss spectrum | | |
| Wavelength range, nm (see grapf Low OH) | 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