



Member of LEONI Group

Ordering information

To order please call, fax or email us and specify the following parameters:

Fiber Type:	j-Lowsol
Fiber Quantity:	m
Other:	Desired ship date, special requests

All fibers and preforms are subject to j-fiber's ongoing process and quality improvement programs ensuring excellent performance and high reliability. We reserve the right to make changes to the above specification without notice.

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with regard to DIN ISO 16016

Officially registered facility
according to EWG No. 1221/2009



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j-Lowsol Low Solarizing Fiber

Ultraviolet radiation exposure impacts the transmission performance and life time of silica fibers. The shorter the wavelength and the higher the intensity and duration of exposure the shorter the fiber life time. j-fiber has developed a product line of solarization resistant preforms and fibers to increase fiber resistance to UV exposure and meet application specific fiber life and transmission stability requirements under UV exposure – especially in the critical < 400 nm range.

For *short life time* fiber applications in spectroscopy, medical devices and industry in the <400nm wavelength range j-fiber offers j-Lowsol Low Solarizing Fiber. The silica core, Fluorine-doped Silica Clad Step Index Multimode fiber provides high transmission stability under short term (8h) UV exposure after special fiber treatment (see Fig.1).

Prior to customer delivery j-Lowsol fibers undergo special treatments to provide for extended fiber life time, a fiber recovery service we also offer to our clients to enhance solarization stability of stored fibers.

j-Lowsol customers benefit from a process chain that integrates our own silica material, proprietary preform design and manufacturing processes as well as our fiber drawing know-how. We thereby ensure sustained fiber performance and minimize solarization specific performance degradation - already by controlling the raw material, preform processes and special fiber treatment.

Applications

- Spectroscopy
- Medical devices
- Industry applications

High Transmission Stability under deep UV exposure

- 75% short-term transmission stability up to 8 h (215 nm Xenon lamp, 25 W)
- 40% short-term transmission stability up to 8 h (215 nm Deuterium lamp, 20 W)
- Ideal for short life time use applications
- j-fiber recovery treatment for extended fiber life time of shared fiber

Fiber Specification

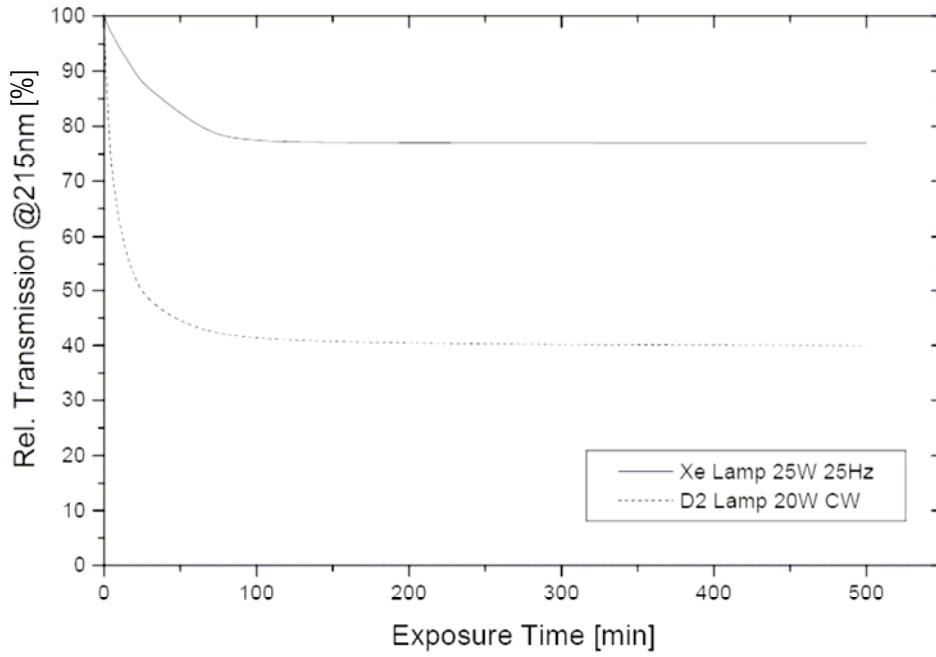
	Spec. Values	Unit
Refractive index profile	Step index	
Numerical aperture	0.22 ± 0.02	
Core diameter	200 ± 2 %	µm
Core material	Undoped synthetic silica	
Clad diameter ¹	220 ± 2 %	µm
Clad material	Fluorine doped synthetic silica	
Coating diameter	270 ± 5 %	µm
Coating material ²	Acrylate	
OH-content	High OH	
Application wavelength	200-800	nm
Operating temperature range	-60 to +85	°C
Proof test	≥ 50	kpsi
Attenuation	@ 215nm < 1.5	dB/m

¹ Other Clad diameter available upon request

² Other available coating types: HTC 200

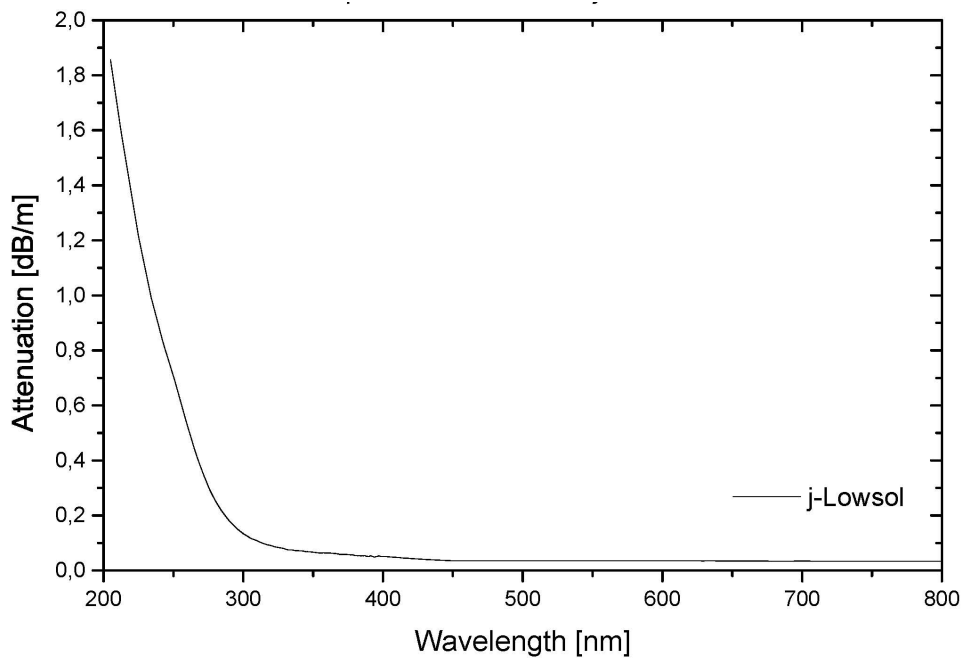
For higher transmission stability than 75% in deep UV we recommend a j-Ultrasol fiber (see our j-Ultrasol Datasheet)

j-Lowsol fiber solarization stability after special treatment



Typical data for j-Lowsol 200 μm core and 220 μm cladding

Typical Spectral Attenuation



Typical data for j-Lowsol 200 μm core and 220 μm cladding