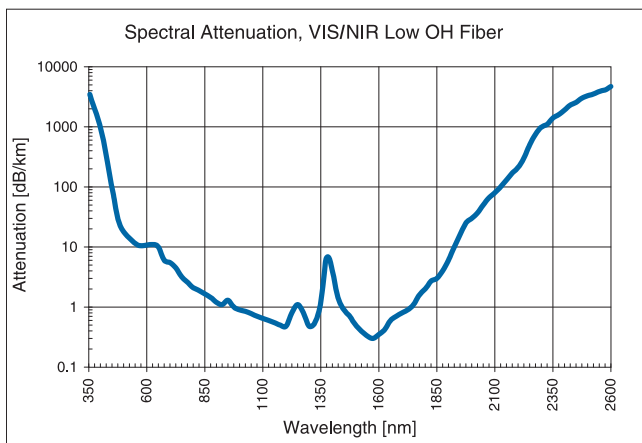
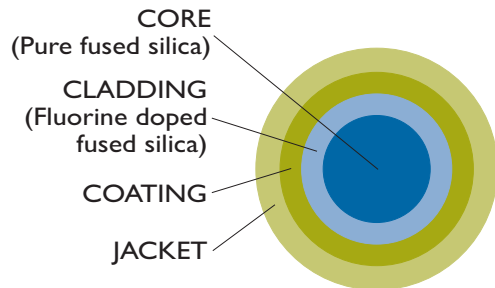


# ALL SILICA VIS/NIR FIBERS

OPERATING SPECTRAL RANGE: 350-2400 NM

## FEATURES

- Superior transmission in the VIS/NIR wavelength range
- Ultra low OH<sup>-</sup> fiber available
- Laser damage resistant
- Radiation resistant
- Specialty coatings available for high temperatures, high vacuum and harsh environments
- Biocompatible materials
- Sterilizable by ETO, e-beam, gamma radiation
- Higher transmission than plastic clad silica (PCS) fibers between 1500 nm and 2500 nm



## FIBER PROPERTIES

- Step index profile
- Clad/core ratio: 1.1, 1.2 typical, 1.05, 1.4, 2.5 also available
- Numerical aperture:  $0.22 \pm 0.02$  typical, 0.10, 0.16, 0.28, 0.35, 0.40 also available
- Proof test: 70 kpsi
- Minimum bend radius:  
300 times the clad radius (momentary)  
600 times the clad radius (long term)
- Laser damage threshold:  
> 5 J/mm<sup>2</sup> (Nd:YAG, 1 ms pulse at 1064 nm)  
> 100 kW/mm<sup>2</sup> (Nd:YAG, cw at 1064 nm)

## OPTIONS

### Coating materials

- Acrylate (-40°C to 85°C)
- Silicone (-40°C to 150°C)
- Polyimide (-190°C to 385°C)

### Jacket materials

- Acrylate (-40°C to 85°C)
- Nylon (-40°C to 100°C)
- Tefzel (-40°C to 150°C)

## APPLICATIONS

### Medical

- Laser surgery
- Ophthalmology
- Photodynamic therapy

### Industrial/Scientific

- Spectroscopy
- Laser welding/soldering
- Laser marking
- Remote sensing
- Aerospace
- Military



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PRODUCT CODE	CORE DIAMETER [μm] ± 2 %	CLAD DIAMETER [μm] ± 2 %	COATING DIAMETER [μm] ± 3 %	STANDARD COATING	SECOND BUFFER DIAMETER [μm] ± 5 %	NUMERICAL APERTURE ± 0.02
<b>NYLON JACKETED FIBERS (-40°C TO 100°C)</b>						
SIR100/140AN	100	140	200	ACRYLATE	400	0.22
SIR200/220AN	200	220	350	ACRYLATE	500	0.22
SIR200/280AN	200	280	440	ACRYLATE	600	0.22
SIR300/330AN	300	330	500	ACRYLATE	650	0.22
SIR400/440AN	400	440	550	ACRYLATE	700	0.22
SIR600/660AN	600	660	800	ACRYLATE	1000	0.22
SIR800/880AN	800	880	1050	ACRYLATE	1300	0.22
SIR1000/1100AN	1000	1100	1250	ACRYLATE	1500	0.22
SIR1500/1650IRAN	1500	1650	1900	ACRYLATE	2200	0.22
<b>TEFZEL JACKETED FIBERS (-40°C TO 150°C)</b>						
SIR200/220ST	200	220	350	SILICONE	500	0.
SIR200/280ST	200	280	450	SILICONE	700	0.22
SIR300/330ST	300	330	450	SILICONE	700	0.22
SIR400/440ST	400	440	550	SILICONE	800	0.22
SIR400/480ST	400	480	580	SILICONE	800	0.22
SIR600/660ST	600	660	800	SILICONE	1200	0.22
SIR600/720ST	600	720	860	SILICONE	1200	0.22
SIR800/880ST	800	880	1000	SILICONE	1550	0.22
SIR1000/1100ST	1000	1100	1250	SILICONE	1800	0.22
<b>ACRYLATE COATED FIBERS (-40°C TO 85°C)</b>						
SIR10/125A	10	125	250	DOUBLE LAYER ACRYLATE	-	0.22
SIR25/125A	25	125	250	DOUBLE LAYER ACRYLATE	-	0.22
SIR100/140A	100	140	250	DOUBLE LAYER ACRYLATE	-	0.22
SIR105/125A	105	125	180	ACRYLATE	-	0.22
<b>POLYIMIDE COATED FIBERS (-190°C TO 385°C)</b>						
SIR50/60PI	50	60	70	POLYIMIDE	-	0.22
SIR100/140PI	100	140	180	POLYIMIDE	-	0.22
SIR200/220PI	200	220	245	POLYIMIDE	-	0.22
SIR200/280PI	200	280	305	POLYIMIDE	-	0.22
SIR300/330PI	300	330	355	POLYIMIDE	-	0.22
SIR400/440PI	400	440	470	POLYIMIDE	-	0.22
SIR600/660PI	600	660	710	POLYIMIDE	-	0.22

**OPTIONAL NYLON OR TEFZEL JACKET FOR POLYIMIDE COATED FIBERS AVAILABLE.**

**OTHER SPECIFICATIONS UPON REQUEST.**