

AS...UV-FIBERS

FEATURES

- Higher transmission than PCS-Fibers between 180 nm and 300 nm
- High core to clad ratio available for high efficiency bundles
- Specialty coatings available for high temperatures, high vacuum and harsh chemicals environments
- Biocompatible materials
- Sterilizable by ETO, steam, e-beam, gamma radiation
- Radiation resistant
- Laser damage resistant



FIBER DESIGN

- Fiber design: Pure fused silica core (high OH)
Fluorine doped fused silica cladding
Acrylate coating (-40°C to 85°C)
Silicone resin coating (-40°C to 180°C)
Polyimide coating (-190°C to 385°C)
- Jacket: Nylon (-40°C to 100°C)
ETFE (-200°C to 150°C)
Acrylate (-40°C to 85°C)

FIBER PROPERTIES

- Core/clad ratio: 1.1
- Numerical aperture: 0.22 ± 0.02
- Operation wavelength range: 180 nm to 1100 nm
- Proof test level (bend method): 70 kpsi
- Bend radius: momentary 100 times the fiber radius
long term 600 times the fiber radius
- Laser damage threshold: $> 50 \text{ mJ/mm}^2$ (XeCl, 25 ns pulse at 248 nm)
 $> 150 \text{ mJ/mm}^2$ (XeCl, 30 ns pulse at 308 nm)
- Radiation induced attenuation: $< 10 \text{ dB/km}$ at dose values above 1 Mrad

OPTIONS

- Core/clad ratios 1.05, 1.07, 1.15, 1.20, 1.30, 1.40
- Numerical apertures 0.07 to 0.28
- Metal coating (-190°C to 750°C)
- Fiber bundles
- Tapered fibers
- Connectors (SMA, FC/PC, ST, DIN)
- AS-Fiber cables

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FIBER SPECIFICATION

NYLON JACKETED FIBERS (-40°C to 85°C)

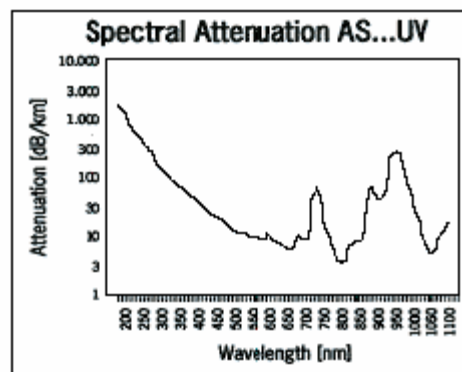
Product code	Core [μ m] $\pm 2\%$	Clad [μ m] $\pm 2\%$	Coating [μ m] $\pm 5\%$	Coating Material	Jacket [μ m] $\pm 5\%$
AS 100/110UVAN	100	110	180	Acrylate	300
AS 200/220UVAN	200	220	350	Acrylate	500
AS 300/330UVAN	300	330	500	Acrylate	700
AS 400/440UVAN	400	440	550	Acrylate	700
AS 600/660UVAN	600	660	800	Acrylate	1000
AS 800/880UVAN	800	880	1000	Acrylate	1200
AS 1000/1100UVAN	1000	1100	1250	Acrylate	1500
AS 1500/1650UVAN	1500	1650	1800	Acrylate	2000

For Silicone coating replace A with S in product code.

ETFE JACKETED FIBERS (-40°C to 150°C)

Product code	Core [μ m] $\pm 2\%$	Clad [μ m] $\pm 2\%$	Coating [μ m] $\pm 5\%$	Coating Material	Jacket [μ m] $\pm 5\%$
AS 100/110UVSE	100	110	180	Silicone	300
AS 200/220UVSE	200	220	350	Silicone	500
AS 300/330UVSE	300	330	500	Silicone	700
AS 400/440UVSE	400	440	550	Silicone	700
AS 600/660UVSE	600	660	800	Silicone	1000
AS 800/880UVSE	800	880	1000	Silicone	1200
AS 1000/1100UVSE	1000	1100	1250	Silicone	1500
AS 1500/1650UVSE	1500	1650	1800	Silicone	2000

For Acrylate coating replace S with A in product code





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POLYIMIDE COATED FIBERS (-190°C to 385°C)

Product code	Core [μm] $\pm 2\%$	Clad [μm] $\pm 2\%$	Coating [μm] $\pm 3\%$
AS 100/110UVPI	100	110	120
AS 200/220UVPI	200	220	235
AS 300/330UVPI	300	330	345
AS 400/440UVPI	400	440	460
AS 600/660UVPI	600	660	680

Other specifications upon request.

BUNDLES FIBER SPECIFICATIONS

Product code	Core [μm] $\pm 2\%$	Clad [μm] $\pm 2\%$	Coating [μm] $\pm 3\%$	Coating Material
AS27/30UVW	27	30		Wet coating
AS46/50UVPI	46	50	58	Polyimide
AS46/50UVW	46	50		Wet coating
AS64/70UVPI	64	70	78	Polyimide
AS64/70UVW	64	70		Wet coating
AS100/110UVPI	100	110	120	Polyimide
AS100/110UVW	100	110		Wet coating
AS200/220UVPI	200	220	235	Polyimide

Other specifications upon request.