

# 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

- 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)

## Properties

- Core/clad ratio: 1.1
- Numerical aperture:  $0.22 \pm 0.02$
- 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 mJ/mm<sup>2</sup> (XeCl, 25 ns pulse at 248 nm)
  - > 150 mJ/mm<sup>2</sup> (XeCl, 30 ns pulse at 308 nm)
- Radiation induced attenuation: < 10 dB/km at dose values above 1 Mrad

## Buffer

- Nylon (-40°C to 100°C)
- ETFE (-200°C to 150°C)
- Acrylate (-40°C to 85°C)
- Polyimide (-190°C to 385°C)

## 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
- Fiber bundles
- Tapered fibers
- Connectors (SMA, FC/PC, ST, DIN)
- AS-Fiber cables



