Fiberguide’s Silica Core/Silica Clad/Hard Polymer Coated/Polymer Outer Coated fibers are similar to the Silica Core/Silica Clad/Polymer Coated Fiber, except there is an added layer of hard polymer on top of the silica cladding. This hard coat serves as a stable buffer layer that ensures a sufficient bond between the silica cladding and the polymer outer coating, making these fibers the ideal choice for a variety of medical applications.

FIBER SPECIFICATIONS

- Step Index Multimode
- Pure Fused Silica Core / Fluorine Doped Silica Cladding
- Hard Polymer Buffer Coating Layer
- Core / Cladding Sizes: 200/240µm to 910/1000µm
- Numerical Aperture (NA): 0.22
- Recommended Bend Radius:
  - Short Term: 100 X Clad Diameter
  - Long Term: 200 X Clad Diameter

Please note that these figures represent best practice recommendations. In applications where tighter bends are required, Fiberguide can assist you in estimating what impact they may have on fiber reliability.

- 100% Proof Test Using 4-Axis Bend Method
- Tefzel (Natural & Blue) certified to NAMSA Class VI

Applications:

- Bio-Analytical Sensing
- Medical Laser
- Aerospace/Defense
- Spectroscopy
- Nuclear Plasma Sensing
- Industrial Laser Systems
Fiber Type: Anhydroguide™ Pure Fused Silica Core/ Fluorine Doped Silica Cladding - Step Index Multimode

Wavelength: VIS-IR (Low OH): 300 nm - 2400 nm

Attachment (dB/km) vs Wavelength (nm)

Transmission (%) vs Wavelength (nm)
**Fiber Type:**
- Step Index Multimode

**Fiber Construction:**
- Silica Core/
- Silica Clad/
- Hard Polymer Coated/
- Polymer Outer Coated Fiber

**Trade Name:**
- Anhydroguide™ VIS-IR (Low OH) 300nm – 2400nm
- Superguide™ UV-VIS (High OH) 190nm – 1250nm

**Fiber Type:** Superguide™ Pure Fused Silica Core/ Fluorine Doped Silica Cladding - Step Index Multimode

**Wavelength:** UV-VIS (High OH): 190 nm - 1250 nm
## Fibre Type:
Step Index Multimode

## Fibre Construction:
- Silica Core/
- Silica Clad/
- Hard Polymer Coated/
- Polymer Outer Coated Fiber

## Trade Name:
Anhydroguide™
- VIS-IR (Low OH): 300 nm – 2400 nm
- Superguide™
  - UV-VIS (High OH): 190 nm – 1250 nm

## Tefzel Coating (Natural)
- Temperature: -40°C to +200°C / -40°F to +392°F
- **Fiber Type:** Anhydroguide™ Pure Fused Silica Core/ Fluorine Doped Silica Cladding - Step Index Multimode
- **Wavelength:** VIS-IR (Low OH): 300 nm - 2400 nm
- **Numerical Aperture (NA):** Standard: 0.22 ± 0.02 (Full acceptance Angle 25˚)
- **Proof Test:** 100 KPSI 4-Axis Bend Test

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<thead>
<tr>
<th>Product Code</th>
<th>Core Diameter (µm)</th>
<th>Cladding Diameter (µm)</th>
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<tbody>
<tr>
<td>AFSH200/240/260/400Z</td>
<td>200 ± 8</td>
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<tr>
<td>AFSH365/400/425/750Z</td>
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</tr>
<tr>
<td>AFSH550/600/630/1040Z</td>
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<td>630 ± 10</td>
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</tr>
<tr>
<td>AFSH910/1000/1035/1400Z</td>
<td>910 ± 30</td>
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## Tefzel Coating (Natural)
- Temperature: -40°C to +200°C / -40°F to +392°F
- **Fiber Type:** Superguide™ Pure Fused Silica Core/ Fluorine Doped Silica Cladding - Step Index Multimode
- **Wavelength:** UV-VIS (High OH): 190 nm – 1250 nm
- **Numerical Aperture (NA):** Standard: 0.22 ± 0.02 (Full acceptance Angle 25˚)
- **Proof Test:** 100 KPSI 4-Axis Bend Test

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# Hard Coat Fiber
(Low & High OH)

**Anhydroguide™ (AFSH) & Superguide™ (SFSH)**

## Fiber Type:
- **Step Index Multimode**

## Construction:
- Silica Core/
- Silica Clad/
- Hard Polymer Coated/
- Polymer Outer Coated Fiber

## Trade Name:
- Anhydroguide™
  - VIS-IR (Low OH): 300 nm – 2400 nm
- Superguide™
  - UV-VIS (High OH): 190 nm – 1250 nm

### Tefzel Coating (Blue)

- **Temperature:** -40°C to +200°C / -40°F to +392°F

#### Fiber Type:
- Anhydroguide™ Pure Fused Silica Core/ Fluorine Doped Silica Cladding - Step Index Multimode

#### Wavelength:
- VIS-IR (Low OH): 300 nm - 2400 nm

#### Numerical Aperture (NA):
- Standard: 0.22 ± 0.02 (Full acceptance Angle 25°)

#### Proof Test:
- 100 KPSI 4-Axis Bend Test

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### Tefzel Coating (Blue)

- **Temperature:** -40°C to +200°C / -40°F to +392°F

#### Fiber Type:
- Superguide™ Pure Fused Silica Core/ Fluorine Doped Silica Cladding - Step Index Multimode

#### Wavelength:
- UV-VIS (High OH): 190 nm - 1250 nm

#### Numerical Aperture (NA):
- Standard: 0.22 ± 0.02 (Full acceptance Angle 25°)

#### Proof Test:
- 100 KPSI 4-Axis Bend Test

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