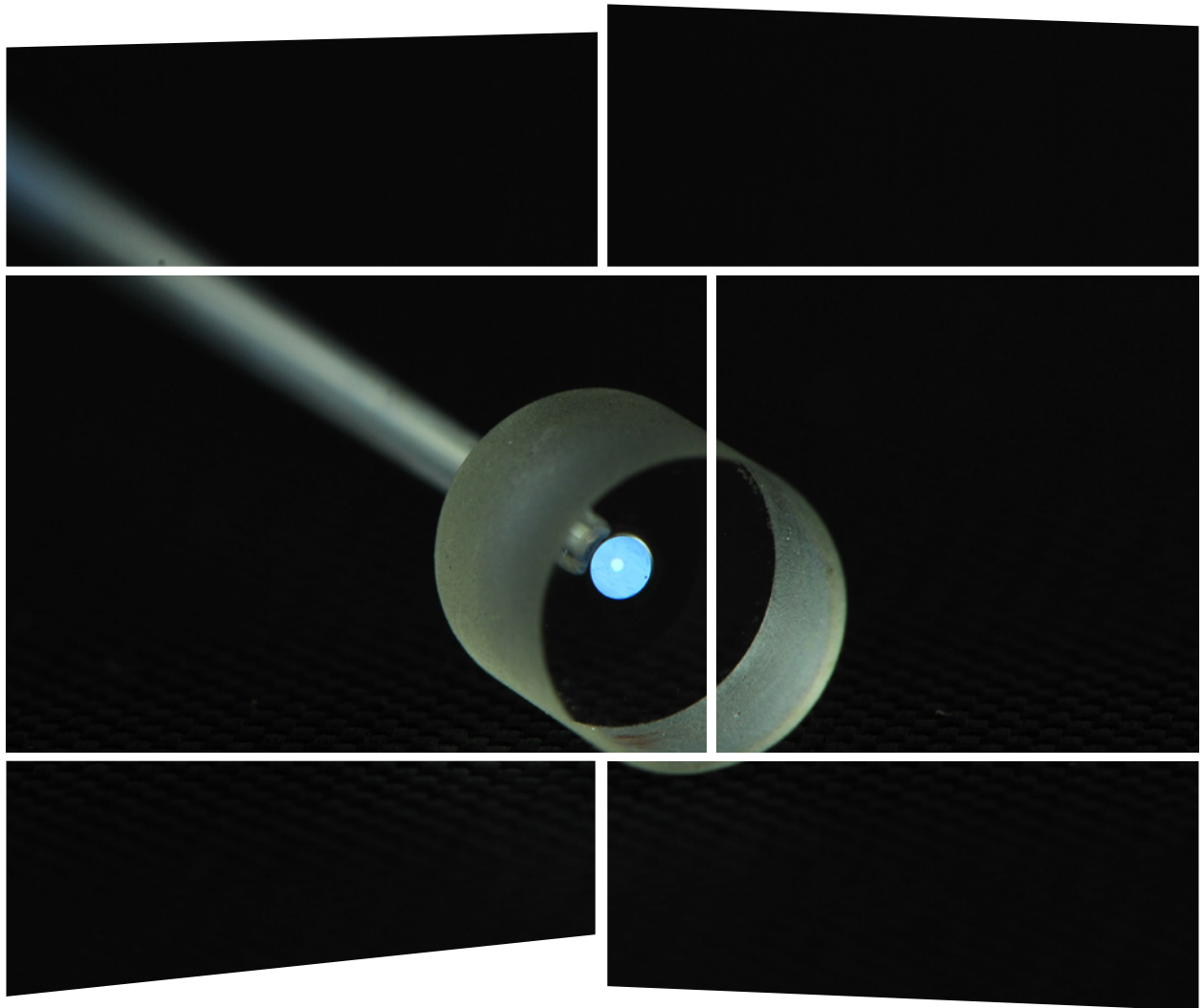


# End-capping

for Photonic Crystal Fibers



**ALPhA** NOV

Optics & Lasers Technology Center

## SMALL END-CAPS

- ▶ For all PCF fibers
- ▶ Pure silica
- ▶ Different diameters and lengths available
- ▶ On-demand polished angle

A small end-cap can be used either to protect the fiber microstructure from dust and humidity or to decrease the beam fluency at the input or output interface without modification of the N.A.

### S-end-cap

- End-cap diameter: 125  $\mu\text{m}$
- End-cap length:  $\leq 100 \mu\text{m}$
- Polished angle:  $0^\circ$
- Material: pure silica

### M-end-cap

- End-cap diameter: from 125  $\mu\text{m}$  to 400  $\mu\text{m}$
- End-cap length:  $\leq 400 \mu\text{m}$
- Polished angle:  $0^\circ$
- Material: pure silica

### L-end-cap

- End-cap diameter: from 400  $\mu\text{m}$  > 1.5 mm
- End-cap length:  $\leq 1.5 \text{ mm}$
- Polished angle:  $0^\circ$
- Material: pure silica

### Options available on-demand for all end-caps

- Custom polished angle (up to  $12^\circ$ )
- Custom length
- AR coating



## 5X5 MM END-CAPS

for high-energy laser beams

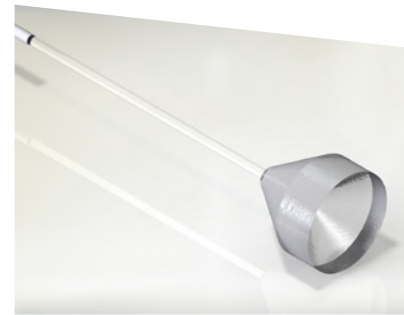
- ▶ For LMA or DC fiber
- ▶ Conical geometry
- ▶ Pure silica
- ▶  $0^\circ$  or  $5^\circ$  polished angle with AR coating

These end-caps are used for high-energy systems. Their unique geometry allows for a strong bond with the fiber, providing the possibility to attach them easily in a mount.

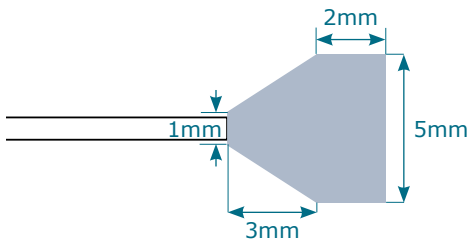
### Specifications

- End-cap diameter: 5 mm
- End-cap length: 5 mm
- Polished angle:  $5^\circ$  or  $0^\circ$  with AR@800-1300 nm
- Material: pure silica

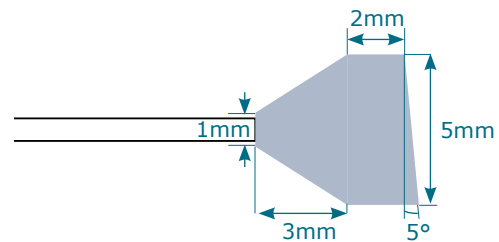
(Other AR coating on-demand)



### Dimensions



Conical end-cap polished at  $0^\circ$  with 800 nm - 1300 nm AR coating



Conical end-cap polished at  $5^\circ$

Special End-Capping development upon request