Collimating Objectives for Mid-IR Fiber Cables

art photonics
broad spectra fiber solutions

Collimating Objectives for Mid IR-Fiber Cables (FOCO) enable the collimated beam to be coupled into the optical fiber or collimate the beam output from the fiber. The housing of the objective easily connects to fiber optic cables either with FC/PC or with SMA connectors and enables the alignment of the lens position along the Z-axis.

Mid-IR Refocusing Objectives are available with anti-reflection (AR) coating for two spectral ranges:

3-5µm – for chalcogenide fiber cables.

8-12µm – for polycrystalline fiber cables.

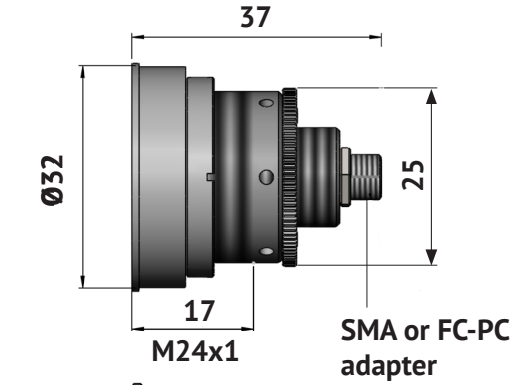
We offer two types of MID-IR fiber refocusing objectives with following lens diameters:

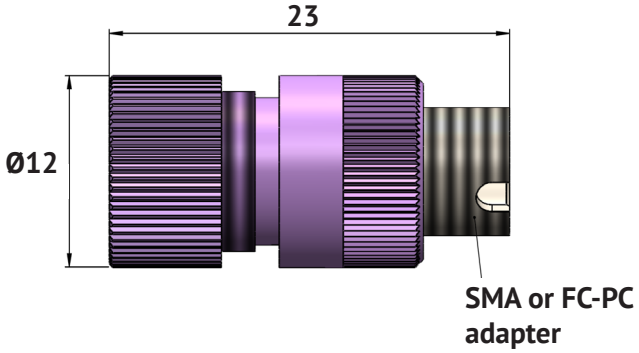
Ø 15mm - FOCO-L

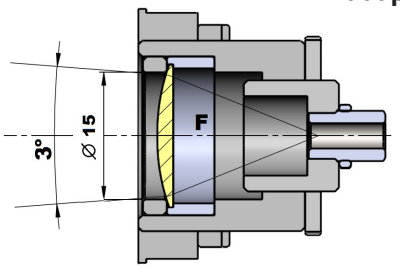
Ø 5mm - FOCO-S

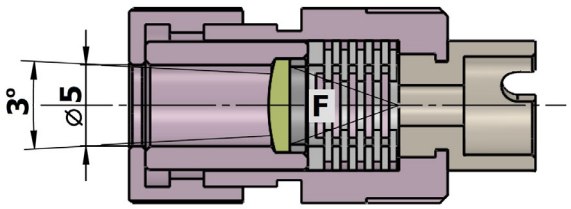
Features:

- Compatible with SMA- or FC-terminated fiber cables
- Pupil diameter 15mm (FOCO-L) or 5 mm (FOCO-S)
- Thread build-in in your optical system
- Non-Magnetic Aluminium Housing









Working Range

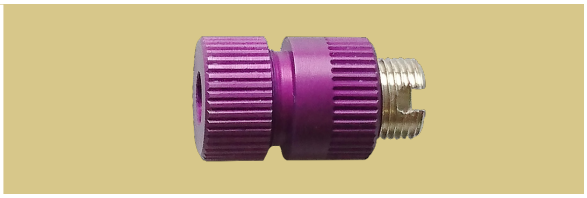
UV | VIS | NIR | MIR

2-17 µm

Applications

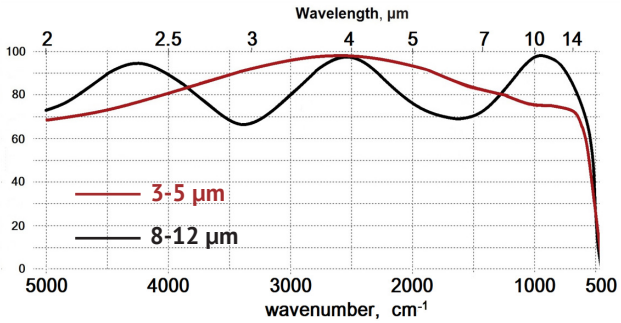
- ✔ Coupling the collimated beam into the fiber
- ✔ Collimating the beam out of the fiber
- ✔ Collecting the radiation into the fiber
- ✔ Fiber end/bundling imaging to detector

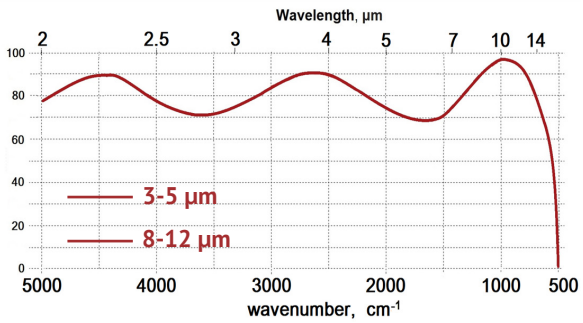
Specification for collimating objectives



Code	FOCO-L-3/5-F20	FOCO-L-8/12-F20	FOCO-S-3/5-F5	FOCO-S-8/12-F5
ZnSe Lens	Plano-convex Ø 5	Plano-convex Ø 5	Plano-convex Ø 5	Plano-convex Ø 5
AR Spectral Range	3-5 µm	8-12 µm	3-5 µm	8-12 µm
Lens Focal Distance	20 mm	20 mm	5 mm	5 mm
Numerical Aperature	0,35	0,35	0,4	0,4
Outer Diameter	25 mm	25 mm	12 mm	12 mm
Connecting Thread	M24x1	M24x1	no	no
Length (approx.)	37 mm	37 mm	23 mm	23 mm
Alignment Options	Z-axis positioning	Z-axis positioning	Z-axis positioning	Z-axis positioning
SMA Adapter	YES	YES	YES	YES
FC/PC Adapter	On Request	On Request	On Request	On Request
Housing	Aluminium Black anodizing	Aluminium Black anodizing	Aluminium Magenta anodizing	Aluminium Magenta anodizing

Transmission Spectra





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