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COLLIMATING LENS

FIBER OPTICS

Operating Manual



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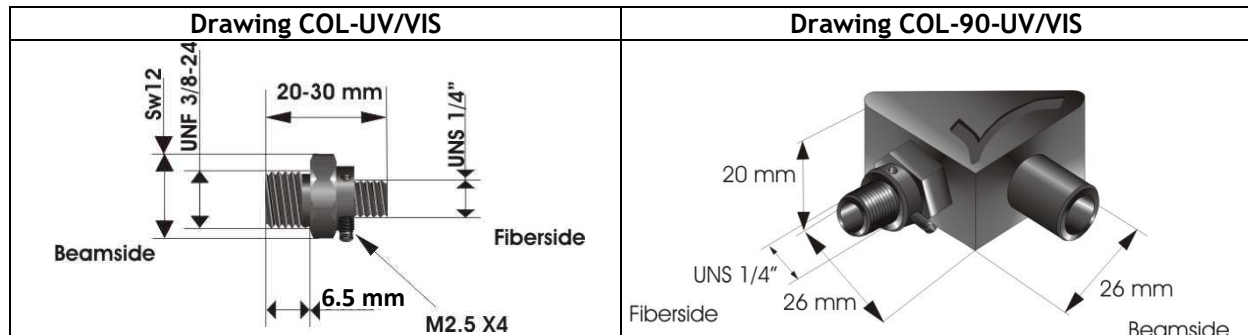
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Collimating Lens Operating Manual

Parts included

1. Collimating Lens
2. 1.27mm Wrench Allen Key
3. The Collimating Lens Operating manual



The COL-UV/VIS collimating lenses screw onto the end of an SMA fiber and convert the divergent beam of radiation light into a parallel beam. Collimating lenses can be used in any optical setup that requires parallel beams of light at the illumination source or at the entrance optics or at both sides. The COL-90-UV/VIS is used to focus the exit light under 90°.

Standard optical fibers have a n.a. of 0.22, which is an acceptance angle of 25°. The collimating lenses are adjustable, providing an acceptance angle of near 0° to about 3°.

The FCR-COL is used to collimate the light of a standard 1/4" ferrule reflection probe, the FCR-COL also has an adjustable focus.

Please follow the below instructions to adjust the focus of your collimating lens:

1. Connect the fiber between the collimating lens and the light source.
2. Turn on the light source and focus the light in a white paper in ca. 100 mm distance.
3. Loosen the setscrew with the Allen Wrench key 1.27 mm on the barrel and slide the inner barrel until you see a sharp focused spot without light intensity and color variations across the beam spot.
4. Tighten the setscrew with the Allen Wrench key 1.27 mm.

Technical Data

	COL-UV/VIS	COL-90-UV/VIS
Lens Diameter	6 mm	
Lens confocal length	8.7 mm	
Lens Material	Fused Silica	
Wavelength range	200-2500nm	
Fiber connection	SMA 905, UNS 1/4", FC/PC also possible	
Mirror reflectivity	n.a.	>90% (200-1100nm)
Housing Material	Aluminum black anodized	
Thread	UNF 3/8"-24	