

Laser Collimator, High Precision

Application :

Industrial and automotive alignment laser for small dimension
 Laser collimated for hand-held positioning and sensing
 Laser scanning and projector for short length
 Short focal length requirement for optical design
 Applications in high temperature or adverse circumstance



Property :

Molded Glass,Aspheric Surfaces

Introduction :

The molding glass collimator lenses are mainly designed with aspherical surface and made by molding technology. Egismos now offer molding glass collimator lens named CO(collimator) – M series.

The advantages of aspherical surface include small size, high performance, stable quality control in mass production and low cost comparing to traditional groundlens. Therefore, molding glass collimator lenses are commonly used in a variety of applications, like industrial laser marking and detecting, distance meters, laser projection and laser optical system.

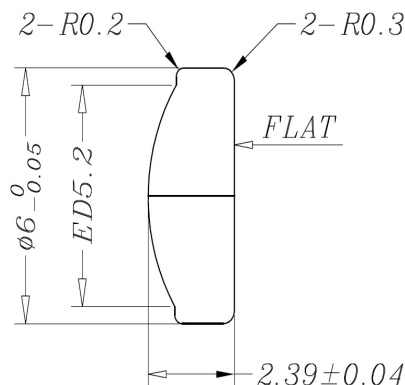
In addition, Egismos provide CO-M series with options in various focal lengths, outer diameters and wavelength band. Besides the listed standard products, Egismos also provide customized and ODM/OEM service in optical design.

Laser Collimator Lens (Molded Glass Lens) Key features :

- Collimated output beam for 400nm~900nm range
- Molded glass lens production process
- High temperature application to 200°C
- High stability and reliability

Part No./ Parameter	λ (nm)	Dia. (mm)	Total Length CT+BFL (mm)	NA (for LD Beam Divergence Angle)	Smallest Beam Size (mm) at 1m	Smallest Beam Size (mm) at 10m
O1-CO-6.0-9.85-M	400~900	6	10.69mm	0.28 (16.76°)	<3.0	<6.0

O1-CO-6.0-9.85-M



Specifications (typical @tc=25°C)

Item.	symbol	
Material		Glass (D-ZK3)
Working Wavelength	λ	400~900nm
Numerical Aperture	NA	0.255 (14.78°)
Effective Focal Length	EFL	9.85mm
Working Distance (Back Focal Length)	WD BFL	8.3mm
Collimated Beam Size		<6mm at 10m <3mm at 1m
Collimated Beam Divergence		≤ 0.6 mrad
Wave Front Error		$\leq 0.5\lambda$ (635nm)
Outer Diameter	OD (Φ)	6.00 +0/-0.05mm
Clear Aperture (Effective Diameter)	CA	5.2mm (R1) R1 $\Phi 5.2$ mm / R2 $\Phi 5.2$ mm
Center Thickness	CT	2.39mm \pm 0.04mm
Transmission (AR Coating)	T(ave)	>98% (400nm-900nm)
Operating Temperature		-40 to +200 °C
Storage Temperature		-60 to +240 °C
Surface Quality (Mill Standard)		60/40

