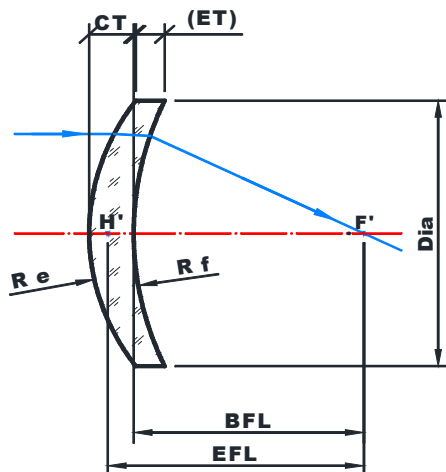


## High Power CO<sub>2</sub> Optics

ZnSe is the typical material for high power CO<sub>2</sub> laser optics due to its low absorption coefficient in infrared wavelengths and its visible transmission. High transmission and Ultra low absorption coating is added to further reduce surface reflection and absorption of laser power. It is widely used for CO<sub>2</sub> laser cutting, welding and laser heat treatment.



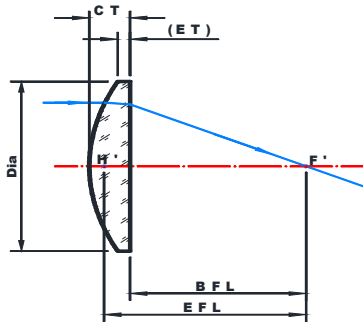
Specifications	
Diameter Tolerance	+0/-0.13mm
Thickness Tolerance	±0.25mm
FL Tolerance	<±2%
ETV	<3 arc minutes
Clear Aperture	>90%
Surface Flatness	<λ/20 @10.6μm
Surface Quality	40-20 scratch and dig
AR/AR coating	R<0.15% per surface @ 10.6μm

### LZM Series - CO<sub>2</sub> Focusing Lens 10.6μm

Part No.	Dia (mm)	EFL (mm)	E.T. (mm)	Type
LZM-1-5-ET2.5	25.4	127.0	2.5	Meniscus
LZM-1.1-1.5-ET5	27.9	38.1	5.0	Meniscus
LZM-1.1-2.5-ET3	27.9	63.5	3.0	Meniscus
LZM-1.1-3.75-ET2	27.9	95.2	2.0	Meniscus
LZM-1.1-5-ET2.7	27.9	127.0	2.7	Meniscus
LZM-1.1-7.5-ET6	27.9	190.5	6.0	Meniscus
LZM-1.5-2.5-ET3	38.1	63.5	3.0	Meniscus
LZM-1.5-3.75-ET6	38.1	96.5	6.0	Meniscus
LZM-1.5-5-ET3	38.1	127.0	3.0	Meniscus
LZM-1.5-7.5-ET3	38.1	190.5	3.0	Meniscus
LZM-1.5-10-ET9	38.1	254.0	9.0	Meniscus
LZM-2-3.75-ET9.6	50.8	96.5	9.6	Meniscus
LZM-2-5-ET8	50.8	127.0	8.0	Meniscus
LZM-2-7.5-ET3.5	50.8	190.5	3.5	Meniscus
LZM-2-10-ET9.6	50.8	254.0	9.6	Meniscus
LZM-2-12.5-ET9.65	50.8	317.5	9.7	Meniscus
LZM-2.5-7.5-ET11	63.5	190.5	11.0	Meniscus

## LZ Series - CO<sub>2</sub> Focusing Lens 10.6μm

LZ series ZnSe Plano-Convex lenses have a positive focal length, they are used to focus a collimated beam to a small spot size, the curved surface will be faced to the input beam to minimize spherical aberration.



Specifications	
Diameter Tolerance	+0/-0.13mm
Thickness Tolerance	±0.25mm
FL Tolerance	<±2%
ETV	<3 arc minutes
Clear Aperture	>90%
Surface Flatness	<λ/20 @10.6μm
Surface Quality	40-20 scratch and dig
AR/AR coating	R<0.15% per surface @ 10.6μm

Part No.	Dia (mm)	EFL (mm)	E.T. (mm)	Type
LZ-1-1.5-ET3	25.4	38.1	3.0	PO/CX
LZ-1-2-ET3	25.4	50.8	3.0	PO/CX
LZ-1-2.5-ET3	25.4	63.5	3.0	PO/CX
LZ-1-3-ET3	25.4	76.2	3.0	PO/CX
LZ-1-4-ET3	25.4	101.6	3.0	PO/CX
LZ-1-5-ET3	25.4	127.0	3.0	PO/CX
LZ-1-10-ET3	25.4	254.0	3.0	PO/CX
LZ-1-12.5-ET4.8	25.4	317.5	4.8	PO/CX
LZ-1-15-ET4.8	25.4	381.0	4.8	PO/CX
LZ-1.1-5-ET3	27.9	127.0	3.0	PO/CX
LZ-1.1-7.5-ET4	27.9	190.5	4.0	PO/CX
LZ-1.5-2.5-ET7.4	38.1	63.5	7.4	PO/CX
LZ-1.5-3.5-ET3	38.1	88.9	3.0	PO/CX
LZ-1.5-3.75-ET3	38.1	96.5	3.0	PO/CX
LZ-1.5-5-ET4	38.1	127.0	4.0	PO/CX
LZ-1.5-7.5-ET4	38.1	190.5	4.0	PO/CX
LZ-1.5-15-ET8	38.1	381.0	8.0	PO/CX
LZ-2-5-ET8	50.8	127.0	8.0	PO/CX
LZ-2-7.5-ET8	50.8	190.5	8.0	PO/CX
LZ-2-8.75-ET7.8	50.8	223.5	7.8	PO/CX
LZ-2-8.75-ET8.5	50.8	223.5	8.5	PO/CX
LZ-2-10-ET7.9	50.8	254.0	7.9	PO/CX
LZ-2.5-8.75-ET9.7	63.5	223.5	9.7	PO/CX
LZ-2.5-10-ET9.9	63.5	254.0	9.9	PO/CX