

Spheric Lenses

Crysmat provides five kinds of lens forms, or shapes, that determine the imaging Characteristics

of the lenses, they are Plano-convex, Plano-concave ,Double-convex, Double-concave and Meniscus.

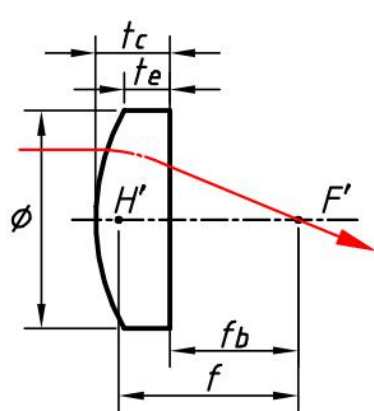
Plano-convex lens has a positive focal length, which makes it ideal for collecting and focusing light for many imaging applications.

Plano-concave lens has a negative focal length and is used for image reduction or to spread light.

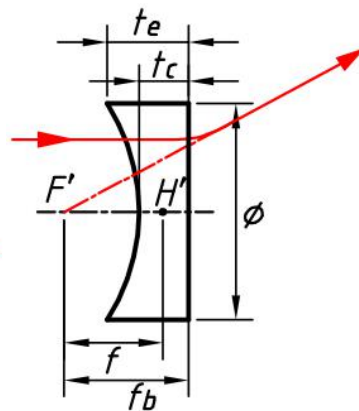
Double-convex lens has a positive focal length and is useful for 1:1 imaging and in multi-element systems. also known as biconvex or equiconvex.

Double-concave lens has a negative focal length and is useful for 1:1 imaging and in multi-element systems. also known as biconcave or equiconcave.

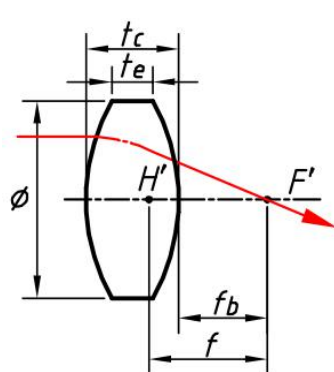
Meniscus lens has a positive or negative focal length, it forms a real or virtual image of objects.



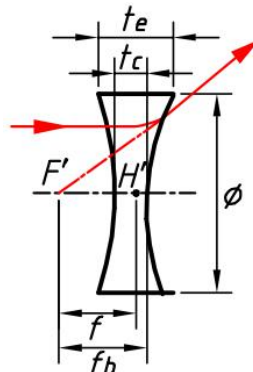
Plano Convex Lens



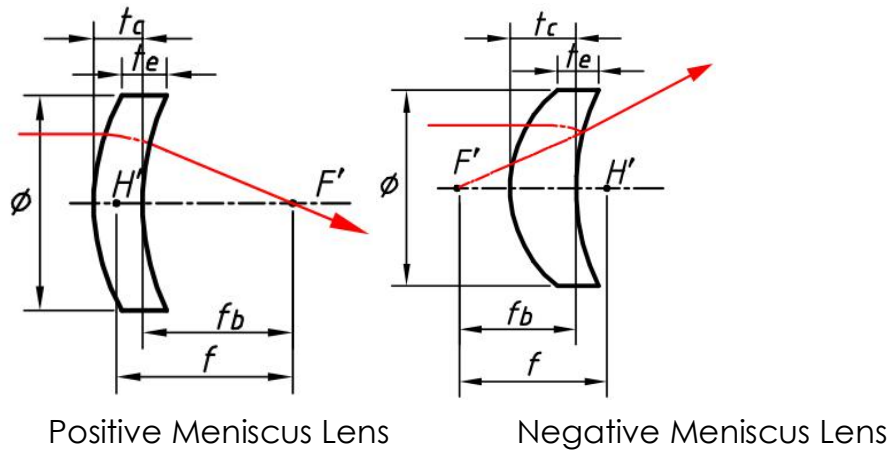
Plano Concave Lens



Double Convex Lens



Double Concave Lens



Attribute	Specification
Material	N-BK7, H-K9L, Fused Silica, N-SF10, Silicon, CaF2, Sapphire etc.
Typical Diameter (Φmm)	10.0, 12.7, 15.0, 20.0, 25.4, 30.0, 50.8, etc.
Diameter Tolerance (mm)	+0.0/-0.2 (General), +0.0/-0.02 (High Precision)
Paraxial Focal Length Tolerance (mm)	±2%
Centration	<3 arc min
Clear Aperture	>80% (Small Size), >95% (Large Size)
Surface Figure (per 25mm@632.8nm)	<1.5λ, (General), <λ/4 (High Precision)
IRR (@632.8nm)	<λ/4 (General), <λ/10 (High Precision)
Surface Quality	60/40 (General), 10/5 (High Precision)
Bevel (face width x 45°)	<0.25mm
Coating	uncoated, AR, HR, PR Coating, etc.

Note for Spheric Lens:

- (1). other optical glass materials from Schott or Chinese CDGM are also available upon request.
- (2). Custom-made Spheric Lenses at any size from diameter 2.0mm to 300mm are available upon request.
- (3). Typical paraxial focal length tolerance is ±2%, better tolerance is available upon request
- (4). Typical centration is 3 arc minutes; better precision is available upon request.
- (5). Besides uncoated, Lenses with Anti-Reflective(AR), High-Reflective(HR), Partial-Reflective(PR) coating are available upon request.