

## CaF<sub>2</sub> Plano-Convex Lenses

Catalogue number CaF <sub>2</sub>	Diameter D, mm		Focal length F, mm	Centre thickness CT, mm	Edge thickness ET, mm	Price, EUR
	Metric	English				
110-5105	12.5	12.7	25.0	4.1	2.0	70
110-5109	12.5	12.7	50.0	3.0	2.0	70
110-5111	12.5	12.7	75.0	2.6	2.0	70
110-5115	12.5	12.7	100.0	2.5	2.0	70
110-5119	12.5	12.7	150.0	2.3	2.0	70
110-5123	12.5	12.7	200.0	2.2	2.0	70
110-5127	12.5	12.7	250.0	2.2	2.0	70
110-5135	12.5	12.7	500.0	2.1	2.0	70
110-5205	25.0	25.4	50.0	7.3	3.0	75
110-5209	25.0	25.4	75.0	5.7	3.0	75
110-5211	25.0	25.4	100.0	5.0	3.0	75
110-5217	25.0	25.4	150.0	4.3	3.0	75
110-5219	25.0	25.4	200.0	4.0	3.0	75
110-5221	25.0	25.4	250.0	3.8	3.0	75
110-5223	25.0	25.4	500.0	3.4	3.0	75
110-5227	25.0	25.4	1000.0	3.2	3.0	75

Please add letter M to the catalogue number for metric dimensions and letter E for English.

### HOUSING ACCESSORIES

Self-Centering  
Lens Mounts  
830-0010, 830-0020  
See page 8.46



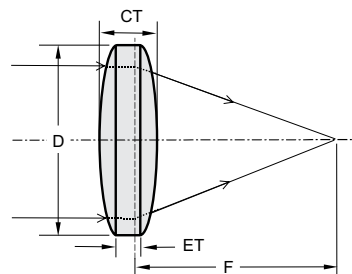
## BICONVEX LENSES

- Have positive focal lengths
- Converge incident light
- Form both real and virtual images
- Minimise spherical aberration as well as cancel coma and distortion at a unit conjugate ratio

Biconvex lenses are all symmetrical, having equal radii on both sides. They are recommended for virtual imaging of real objects and for positive conjugate ratios from 0.2 up to 5. Outside this ratio range plano-convex lenses are usually more suitable. Biconvex lenses are used as magnifiers, objectives, some condensing systems.

Since both surfaces contribute to the power of biconvex lenses, they have shorter focal lengths than plano-convex lenses of equal diameter and surface radius.

*Upon customer's request, lenses may be anti-reflection coated. For a required coating please refer to Coatings section.*



### SPECIFICATIONS

Material	BK7, UV FS	
Surface quality	40-20 scratch & dig (MIL-PRF-13830B)	
Clear aperture	90% of the diameter	
Diameter tolerance	+0.00 -0.12 mm	
Thickness tolerance	±0.5 mm	
Surface irregularity	λ/8 @ 633 nm	
Concentricity	3 arcmin	
Paraxial focal length	BK7	±2% @ 546 nm
	UV FS	±2% @ 355 nm

*Please contact us if you can not find the lens that you need.  
We can provide a wide range of special focal lengths,  
diameters and coatings.*