

## Plano Concave Lenses

Plane concave lens is made up of a plane and a concave spherical surface. It has a negative focal length, which made its application range is very wide. In the optical system used for beam expander, projection light and expanding optical system focal length. Plane concave lens collimation beam can be spread to a virtual focus, usually use in Galileo type beam expander machine, plane concave lens with negative focal length and negative spherical aberration, which can be used to offset other lens aberration in the system. Boxin provides a variety of material plane concave lens, including H-K9L, H-ZF13, UV Fused Silica etc.

### H-K9L Plano-Concave Lenses

Material: H-K9L

Diameter Tolerance: 0.0/-0.1mm

CT Tolerance:  $\pm 0.1$ mm

EFL Tolerance:  $\pm 1\%$

Design Wavelength: 587.6nm

Clear Aperture:  $\geq 90\%$

Surface Quality: 40/20(Diameter $\leq 25.4$ mm),

60/40(Diameter $> 25.4$ mm)

Surface Flatness:  $\lambda/4@633$ nm

Centration Error:  $\leq 3'$

Bevel:  $0.3 \times 45^\circ$ (Diameter $\leq 50.8$ mm),  $0.4 \times 45^\circ$ (Diameter $> 50.8$ mm)

Coating:

MGF: Anti-reflection coating: MgF<sub>2</sub>, R<sub>avg</sub> $< 1.75\%$  per surface@400-700nm

A: Anti-reflection coating: R<sub>avg</sub> $< 0.5\%$  per surface@370-675nm

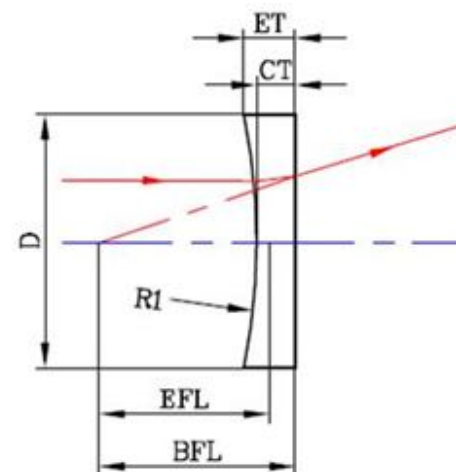
B: Anti-reflection coating: R<sub>avg</sub> $< 0.5\%$  per surface@650-1050nm

C: Anti-reflection coating: R<sub>avg</sub> $< 0.5\%$  per surface@1050-1620nm

AB: Anti-reflection coating: R<sub>avg</sub> $< 1.25\%$  per surface@400-1000nm

V: Anti-reflection coating: R $< 0.25\%$  per surface (532nm, 808nm, 1064nm etc.)

Other coating: Customer specified.



## Order Information:

Item	Dimension(mm) Diameter	Effective Focal Length EFL(mm)	Back focal length BFL(mm)	Center Thickness CT(mm)	Edge Thickness ET(mm)	Radius R1(mm)	Material
PCV01-001	6	-12	-13.0	1.5	2.1	-6.20	H-K9L
PCV01-002	6	-15	-16.3	2	2.5	-7.75	H-K9L
PCV01-003	6	-18	-19.3	2	2.4	-9.30	H-K9L
PCV01-004	12	-24	-26.3	3.5	4.8	-12.40	H-K9L
PCV01-005	25	-50	-52.3	3.5	6.3	-25.84	H-K9L
PCV01-006	25	-100	-102.3	3.5	4.9	-51.68	H-K9L
PCV01-007	50	-100	-103.3	5	11.2	-51.68	H-K9L
PCV01-008	12.7	-25	-27.0	3	4.7	-12.92	H-K9L
PCV01-009	12.7	-30	-32.0	3	4.4	-15.50	H-K9L
PCV01-010	12.7	-50	-52.3	3.5	4.3	-25.84	H-K9L
PCV01-011	25.4	-50	-52.3	3.5	6.8	-25.84	H-K9L
PCV01-012	25.4	-75	-77.3	3.5	5.6	-38.76	H-K9L
PCV01-013	25.4	-100	-102.6	4	5.6	-51.68	H-K9L
PCV01-014	50	-75	-77.3	3.5	12.6	-38.76	H-K9L
PCV01-015	50	-150	-152.6	4	8.1	-77.52	H-K9L
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Note: Other spec please Customer specified.