

Cylinder Lenses

Cylinder Lenses are typically used to focus incoming light to a line, or to change the aspect ratio of an image. Cylindrical Lenses have a single cylindrical surface that causes incoming light to be focused in only a single dimension, stretching the image. Cylinder Lenses are available with positive or negative focal lengths, ideal for laser line generation or anamorphic beam shaping to circularize laser outputs.

Boxin Optics selection of Cylinder Lenses include achromatic, acylinder, plano-convex, or plano-concave. Achromatic Cylinder Lenses provide additional color correction by minimizing chromatic aberration. Hybrid Acylinder Lenses are ideal for color correction, in addition to minimizing spherical aberration. Boxin Optics offers Cylinder Lenses with glass or plastic substrates, or with circular, rectangular, or oblong dimensions. Multiple anti-reflection coating options are available from the ultraviolet to the infrared, including UV-AR, UV-VIS, MgF₂, VIS-NIR, VIS 0°, or NIR I. Boxin Optics offers full prescription data, in addition to 2D or 3D models.

H-K9L Plano-Convex Cylinder Lenses

Material: H-K9L

Dimension Tolerance: 0.0/-0.1mm

CT Tolerance: ±0.1mm

EFL Tolerance: ±2%

Design Wavelength: 587.6nm

Clear Aperture: ≥90%

Surface Quality: 60/40

Surface Flatness: $\lambda/2@633\text{nm}$

Centration Error: ≤3'

Bevel: 0.2×45°

Coating: MGF: Anti-reflection coating: MgF₂, R_{avg}<1.75% per surface@400-700nm

A: Anti-reflection coating: R_{avg}<0.5% per surface@370-675nm

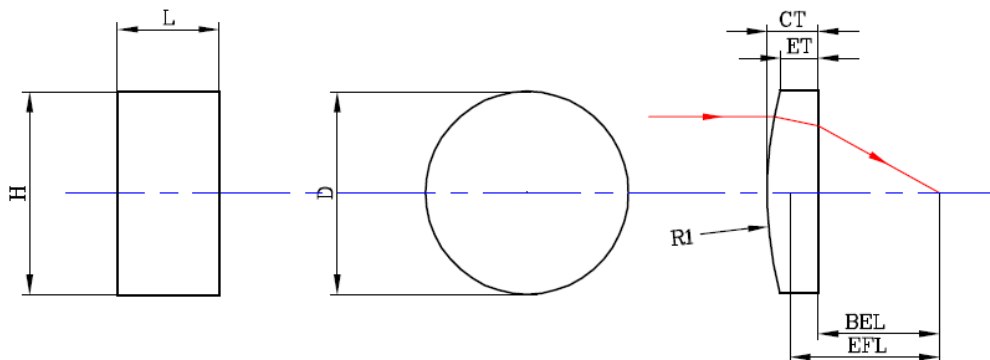
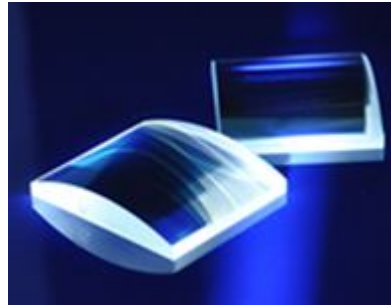
B: Anti-reflection coating: R_{avg}<0.5% per surface@650-1050nm

C: Anti-reflection coating: R_{avg}<0.5% per surface@1050-1620nm

AB: Anti-reflection coating: R_{avg}<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	Effective Focal Length	Back focal length	Center Thickness	Edge Thickness	Radius R1	Material
PCXCY01-001	6	12	10.6	2.2	1.4	10.55	H-K9L
PCXCY01-002	6	18	16.8	1.8	1.3	9.30	H-K9L
PCXCY01-003	6	24	22.9	1.6	1.2	12.40	H-K9L
PCXCY01-004	8	13.5	11.8	2.7	1.4	7.00	H-K9L
PCXCY01-005	12.5	12.5	7.6	7.5	2.7	6.48	H-K9L
PCXCY01-006	12.5	25	23.1	2.9	1.3	12.96	H-K9L
PCXCY01-007	12.5	50	48.8	1.9	1.1	25.93	H-K9L
PCXCY01-008	12.5	75	73.7	2.0	1.5	38.76	H-K9L
PCXCY01-009	12.5	100	98.7	2.0	1.6	51.68	H-K9L
PCXCY01-010	25	25	17.8	11.0	1.5	12.96	H-K9L
PCXCY01-011	25	50	47.4	4.2	1.0	25.93	H-K9L
PCXCY01-012	25	75	73.2	3.1	1.0	38.89	H-K9L
PCXCY01-013	25	100	98.2	3.2	1.6	51.85	H-K9L
PCXCY01-014	25	125	123.0	3.0	1.8	64.60	H-K9L
PCXCY01-015	25	150.5	148.2	3.5	2.5	77.78	H-K9L
PCXCY01-016	50	75	68.1	10.5	1.4	38.89	H-K9L
PCXCY01-017	50	100	94.9	7.7	1.3	51.85	H-K9L
PCXCY01-018	50	150	146.5	5.3	1.2	77.78	H-K9L
PCXCY01-019	4.5(H)×5.5(L)	5	2.8	3.3	2.0	2.58	H-K9L
PCXCY01-020-H	7(H)×10(L)	14.8	12.9	2.8	2.0	7.63	H-K9L
PCXCY01-020-H	7(H)×15(L)	14.8	12.9	2.8	2.0	7.63	H-K9L
PCXCY01-021	7(H)×15(L)	20	18.1	2.8	2.2	10.30	H-K9L
PCXCY01-022	10(H)×10(L)	60	58.3	2.6	2.2	31.00	H-K9L
PCXCY01-023	10(H)×10(L)	70	68.1	2.6	2.3	36.10	H-K9L
PCXCY01-024	10(H)×18(L)	80	77.3	4.0	3.7	41.30	H-K9L
PCXCY01-025	10(H)×20(L)	19.4	12.8	10.0	8.7	10.00	H-K9L
PCXCY01-026	10(H)×20(L)	20	17.8	3.3	2.0	10.34	H-K9L
PCXCY01-027	12.5(H)×25(L)	20	17.6	3.6	1.5	10.34	H-K9L
PCXCY01-028	12.5(H)×25(L)	25	23.0	3.0	1.4	12.92	H-K9L
PCXCY01-029	12.5(H)×25(L)	50	48.7	2.0	1.2	25.84	H-K9L
PCXCY01-030	12.5(H)×25(L)	75	73.7	2.0	1.5	38.76	H-K9L
PCXCY01-031	12.5(H)×25(L)	100	98.7	2.0	1.6	51.68	H-K9L
PCXCY01-032	12.5(H)×25(L)	150	148.7	2.0	1.8	148.66	H-K9L
PCXCY01-033	25(H)×24(L)	80	77.4	4.0	2.1	41.34	H-K9L
PCXCY01-034	25(H)×50(L)	25	17.7	11.0	1.5	12.96	H-K9L
PCXCY01-035	25(H)×50(L)	50	47.2	4.2	1.0	25.93	H-K9L
PCXCY01-036	25(H)×50(L)	75	72.9	3.1	1.0	38.89	H-K9L
PCXCY01-037	25(H)×50(L)	100	98.0	3.2	1.6	51.85	H-K9L
PCXCY01-038	25(H)×50(L)	150	147.7	3.5	2.5	77.78	H-K9L
PCXCY01-039	30(H)×17(L)	100	96.6	5.2	3.0	51.68	H-K9L
PCXCY01-040	50(H)×25(L)	75	68.1	10.5	1.4	38.89	H-K9L
PCXCY01-041	50(H)×25(L)	100	94.9	7.7	1.3	51.85	H-K9L
PCXCY01-042	50(H)×25(L)	150	146.5	5.3	1.2	77.78	H-K9L

Note: Other spec please Customer specified.