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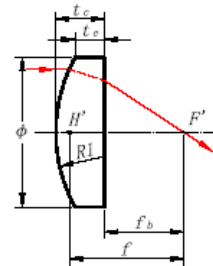
Plano-Convex Lens



Plano-Convex Lens is widely use in optical display systems, projection optics systems, imaging optical systems, and laser measurement systems. It is best use where conjugate point-- object distance, S or image distance S' is more than five times of the other. This lens is almost the most super form for both collimating a point source and focusing collimated ligh.

Applications:

- Optical Display Systems
- Projection Optics System
- Imaging Optics Systems
- Laser Measurements Systems



BK7 Plano-Convex Lens

Specifications:	
Material	BK7 grade A optical glass
Design Wavelength	546.1nm
Design Index	1.5183±0.0005
Diameter Tolerance	+0.00/-0.15mm
Paraxial Focus Length	±2% @546.1nm
Centration	see the table
Clear Aperture	>Central 85% of diameter
Surface Figure	λ/4@632.8nm
Surface Quality	60-40 S/D
Protective Bevel	<0.25mm x 45°

BK7 Plano-Convex Lens Standard Products:

Part No.	f (mm)	φ(mm)	R ₁ (mm)	Centration (arc minutes)	t _c (mm)	t _e (mm)	f _b (mm)
LPX0101	4.0	2.0	2.073	15	1.26	1.0	3.2
LPX0102	5.0	3.0	2.592	10	1.48	1.0	4.0
LPX0103	6.0	4.0	3.101	3	1.5	0.77	5.0
LPX0104	8.0	6.0	4.150	3	3.3	2.0	5.8
LPX0105	10.0	6.0	5.180	3	3.0	2.0	8.0
LPX0106	15.0	10.0	7.780	3	3.8	2.0	12.5
LPX0107	22.0	10.0	11.400	3	3.1	1.9	20.0
LPX0201	15.0	12.7	7.780	3	5.3	2.0	11.5
LPX0202	20.0	12.7	10.370	3	4.2	2.0	17.2
LPX0205	40.0	12.7	20.730	3	3.0	2.0	38.0
LPX0206	50.0	12.7	25.920	3	2.8	2.0	48.2
LPX0208	100.0	12.7	51.83	3	2.4	2.0	98.4
LPX0213	40.0	20.0	20.730	3	4.5	1.9	37.0
LPX0304	60.0	22.4	31.100	3	4.1	2.0	57.3
LPX0308	25.4	25.4	13.170	3	11.7	2.0	17.7
LPX0311	50.0	25.4	25.920	3	5.3	2.0	46.5
LPX0312	50.8	25.4	26.351	3	5.2	1.9	47.4
LPX0316	100.0	25.4	51.83	3	3.6	2.0	97.6
LPX0321	200.0	25.4	103.66	3	2.8	2.0	198.2

LPX0324	500.0	25.4	259.15	3	2.3	2.0	498.5
LPX0325	1000.0	25.4	518.30	3	2.2	2.0	998.6
LPX0326	35.0	30.0	18.155	3	9.9	2.0	28.5
LPX0327	80.0	30.0	41.46	3	4.8	2.0	76.8
LPX0328	100.0	30.0	51.83	3	4.2	2.0	97.2
LPX0330	300.0	30.0	155.62	3	3.8	3.1	293.5
LPX0401	50.0	38.0	25.920	3	11.3	3.0	42.6
LPX0405	200.0	38.0	103.66	3	4.8	3.0	196.8
LPX0408	700.0	38.0	362.81	3	3.5	3.0	697.7
LPX0502	100.0	50.0	51.83	3	9.4	3.0	93.8
LPX0504	200.0	50.0	206.28	3	6.0	3.0	198.0
LPX0508	500.0	50.0	517.58	3	4.2	3.0	498.6
LPX0510	800.0	50.0	828.64	3	3.8	3.0	798.7
LPX0601	500.0	80.0	517.678	3	6.1	2.0	498.0
LPX0602	250.0	100.0	257.0	3	13.7	3.9	245.4

Fused Silica Plano-Convex Lens

Specifications:	
Material	UV grade fused silica
Design Wavelength	546.1nm
Design Index	1.46008±0.00005
Diameter Tolerance	+0.00/-0.15mm
Paraxial Focus Length	±2% @546.1nm
Centration	<3 arc minutes
Clear Aperture	>Central 85% of diameter
Surface Figure	λ/4@632.8nm
Surface Quality	60-40 S/D
Protective Bevel	<0.25mm x 45°

Fused Silica Plano-Convex Lens Standard Products:

Part No.	f (mm)	φ(mm)	R ₁ (mm)	t _c (mm)	t _e (mm)	f _b (mm)
LPX1101	6.0	4.0	2.760	1.66	0.8	4.86
LPX1102	10.0	5.0	4.600	1.74	1.0	8.81
LPX1103	8.0	6.0	3.680	2.55	1.0	6.25
LPX1104	10.0	6.0	4.600	2.12	1.0	8.55
LPX1201	15.0	12.7	6.900	6.2	2.0	10.8
LPX1202	20.0	12.7	9.200	4.5	2.0	16.9
LPX1204	30.0	12.7	13.800	3.6	2.0	27.5
LPX1205	40.0	12.7	18.400	3.1	2.0	37.9
LPX1302	50.0	25.4	23.000	5.8	2.0	46.0
LPX1303	75.0	25.4	34.510	4.4	2.0	72.0
LPX1304	100.0	25.4	46.01	3.8	2.0	97.4
LPX1307	200.0	25.4	92.02	2.9	2.0	198.0
LPX1310	500.0	25.4	230.04	2.4	2.0	498.4
LPX1311	1000.0	25.4	460.08	2.2	2.0	998.5
LPX1401	50.0	38.0	23.000	13.0	3.0	41.1
LPX1402	100.0	38.0	46.01	7.1	3.0	95.1
LPX1404	200.0	38.0	92.02	5.0	3.0	196.6
LPX1406	500.0	38.0	230.04	3.8	3.0	497.4

Note: Cutting Lens, Square Lens, Rectangle Lens and Coatings are available upon request.

Metal Mount is available upon request. Lenses with material B270, Pyrex, Sapphire, Silicon, Germanium, CaF₂, ZnSe etc are also available upon request.

The general tolerance specifications above provide a guideline regarding manufacturing capabilities for optics ranging in size from diameter 0.6-350mm. The manufacturing limits are not absolute; tighter tolerances may be possible. Part specific tolerances may vary depending on component size, shape, and/or material.