

## Plano-Convex Lenses

Plano-Convex lenses have positive focal lengths, converge incident light, and form both real images (as might be focused in a piece of paper), and virtual images (as are seen through the lenses when they are used as magnifiers).

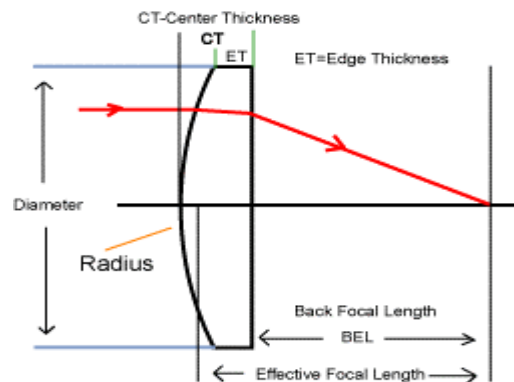


They are widely used in telescopes, collimators, optical transceivers, magnifiers, radiometers and condensers.

### BK7 Plano-Convex Lenses

#### Specifications:

- Material: **BK7 Grade A Fine Annealed**
- Design Wavelength: 633nm
- Design Index:  $N_d=1.515082$
- Diameter Tolerance:  $+0/-0.1\text{mm}$
- Focal Length:  $\pm 1\%$
- Centration: 3 arc minutes
- Clear Aperture:  $>90\%$
- Surface Quality: 60/40
- Surface Accuracy:  $2\lambda$  on spherical surface,  $\lambda$  on plano surface
- Bevel:  $0.25\text{mm} \times 45^\circ$



Dia.(mm)	EFL(mm)	Radius(mm)	CT(mm)	ET(mm)	BFL(mm)	Part No.
6.00	10.00	5.15	2.46	1.50	8.37	LPC1001
6.00	12.00	6.18	2.28	1.50	10.50	LPC1002
6.00	15.00	7.73	2.11	1.50	13.61	LPC1003
6.00	30.00	15.54	1.79	1.50	28.82	LPC1004
9.00	12.00	6.18	3.44	1.50	9.73	LPC1005
9.00	20.00	10.30	2.53	1.50	18.33	LPC1006
12.70	15.00	7.73	5.12	1.80	11.62	LPC1007
12.70	20.00	10.30	3.99	1.80	17.37	LPC1008
12.70	25.00	12.88	3.47	1.80	22.71	LPC1009
12.70	30.00	15.45	3.17	1.80	27.91	LPC1010
12.70	40.00	20.60	2.80	1.80	38.15	LPC1011
12.70	50.00	25.75	2.60	1.80	48.29	LPC1012

12.70	100.00	51.51	2.19	1.80	98.55	LPC1013
18.00	20.00	10.30	7.09	1.80	15.32	LPC1014
18.00	25.00	12.88	5.47	1.80	21.39	LPC1015
18.00	30.00	15.45	4.69	1.80	26.90	LPC1016
18.00	50.00	25.75	3.42	1.80	47.74	LPC1017
25.40	25.40	13.08	11.74	1.80	17.65	LPC1018
25.40	30.00	15.45	8.65	2.00	24.29	LPC1019
25.40	35.00	18.03	7.23	2.00	30.23	LPC1020
25.40	40.00	20.60	6.38	2.00	35.79	LPC1021
25.40	50.00	25.75	5.35	2.00	46.47	LPC1022
25.40	60.00	30.90	4.73	2.00	56.88	LPC1023
25.40	75.00	38.63	4.15	2.00	72.26	LPC1024
25.40	100.00	51.51	3.59	2.00	97.63	LPC1025
25.40	125.00	64.39	3.26	2.00	122.85	LPC1026
25.40	150.00	77.26	3.05	2.00	147.99	LPC1027
25.40	175.00	90.14	2.90	2.00	173.09	LPC1028
25.40	200.00	103.02	2.79	2.00	198.16	LPC1029
25.40	250.00	128.77	2.63	2.00	248.27	LPC1030
25.40	300.00	154.52	2.52	2.00	298.33	LPC1031
25.40	400.00	206.03	2.39	2.00	398.42	LPC1032
25.40	500.00	257.54	2.31	2.00	498.47	LPC1033
25.40	750.00	386.31	2.21	2.00	748.54	LPC1034
25.40	1000.00	515.08	2.16	2.00	998.58	LPC1035
30.00	40.00	20.60	8.98	2.50	34.07	LPC1036
30.00	50.00	25.75	7.32	2.50	45.17	LPC1037
30.00	75.00	38.63	5.53	2.50	71.35	LPC1038
30.00	100.00	51.51	4.73	2.50	96.88	LPC1039
30.00	120.00	61.18	4.53	2.50	117.13	LPC1040
50.80	60.00	30.90	16.30	3.00	49.24	LPC1041
50.80	75.00	38.63	12.52	3.00	66.73	LPC1042
50.80	100.00	51.51	9.70	3.00	93.60	LPC1043
50.80	125.00	64.39	8.22	3.00	119.57	LPC1044
50.80	150.00	77.26	7.29	3.00	145.19	LPC1045
50.80	175.00	90.14	6.65	3.00	170.61	LPC1046
50.80	200.00	103.02	6.18	3.00	195.92	LPC1047
50.80	250.00	128.77	5.53	3.00	246.35	LPC1048
50.80	300.00	154.52	5.10	3.00	296.63	LPC1049

50.80	400.00	206.03	4.57	3.00	396.98	LPC1050
50.80	500.00	257.54	4.26	3.00	497.19	LPC1051
50.80	750.00	386.31	3.84	3.00	747.47	LPC1052
50.80	1000.00	515.08	3.63	3.00	997.61	LPC1053
75.00	85.00	43.78	24.19	3.00	69.04	LPC1054
75.00	100.00	51.51	19.20	3.00	87.33	LPC1055
75.00	150.00	77.26	12.71	3.00	141.61	LPC1056
75.00	200.00	103.02	10.07	3.00	193.35	LPC1057

### Fused Silica Plano-Convex Lenses

#### Specifications:

- Material: **UV Fused Silica**
- Design Wavelength: 588nm
- Design Index:  $N_d=1.46008$
- Diameter Tolerance:  $+0/-0.1\text{mm}$
- Focal Length:  $\pm 1\%$
- Centration: 3 arc minutes
- Clear Aperture:  $>90\%$
- Surface Quality: 60/40
- Surface Accuracy:  $2\lambda$  on spherical surface,  $\lambda/2$  on plano surface
- Bevel: 0.25mm x 45°

Dia.(mm)	EFL(mm)	Radius(mm)	CT(mm)	ET(mm)	BFL(mm)	Part No.
6.00	10.00	4.60	2.61	1.50	8.37	LPC2001
6.00	12.00	5.52	2.39	1.50	10.50	LPC2002
6.00	15.00	6.90	2.19	1.50	13.61	LPC2003
6.00	30.00	13.80	1.83	1.50	28.82	LPC2004
9.00	12.00	5.52	3.82	1.50	9.73	LPC2005
9.00	20.00	9.20	2.68	1.50	18.33	LPC2006
12.70	20.00	9.20	4.34	1.80	17.37	LPC2007
12.70	25.00	11.50	3.71	1.80	22.71	LPC2008
12.70	30.00	13.80	3.35	1.80	27.91	LPC2009
12.70	40.00	18.40	2.93	1.80	38.15	LPC2010
12.70	50.00	23.00	2.69	1.80	48.29	LPC2011
12.70	100.00	46.00	2.24	1.80	98.55	LPC2012
18.00	20.00	9.20	9.09	1.80	15.32	LPC2013

18.00	25.00	11.50	6.14	1.80	21.39	LPC2014
18.00	30.00	13.80	5.14	1.80	26.90	LPC2015
18.00	50.00	23.00	3.63	1.80	47.74	LPC2016
25.40	40.00	18.40	7.09	2.00	35.79	LPC2017
25.40	50.00	23.00	5.82	2.00	46.47	LPC2018
25.40	60.00	27.60	5.10	2.00	56.88	LPC2019
25.40	75.00	34.50	4.42	2.00	72.26	LPC2020
25.40	100.00	46.00	3.79	2.00	97.63	LPC2021
25.40	125.00	57.50	3.42	2.00	122.85	LPC2022
25.40	150.00	69.00	3.18	2.00	147.99	LPC2023
25.40	175.00	80.50	3.01	2.00	173.09	LPC2024
25.40	200.00	92.00	2.88	2.00	198.16	LPC2025
25.40	250.00	115.00	2.70	2.00	248.27	LPC2026
25.40	300.00	138.00	2.59	2.00	298.33	LPC2027
30.00	50.00	23.00	8.06	2.50	45.17	LPC2028
30.00	75.00	34.50	5.93	2.50	71.35	LPC2029
30.00	100.00	46.00	5.01	2.50	96.88	LPC2030
30.00	120.00	55.20	4.58	2.50	117.13	LPC2031
50.80	60.00	27.60	19.80	3.00	49.24	LPC2032
50.80	75.00	34.50	14.15	3.00	66.73	LPC2033
50.80	100.00	46.00	10.65	3.00	93.60	LPC2034
50.80	125.00	57.50	8.91	3.00	119.57	LPC2035
50.80	150.00	69.00	7.85	3.00	145.19	LPC2036
50.80	175.00	80.50	7.11	3.00	170.61	LPC2037
50.80	200.00	92.00	6.58	3.00	195.92	LPC2038
50.80	250.00	115.00	5.84	3.00	246.35	LPC2039
50.80	300.00	138.00	5.36	3.00	296.63	LPC2040
50.80	400.00	184.00	4.76	3.00	396.98	LPC2041

### Other Plano-Convex Lenses

#### Specifications:

- Material: **B270, SF11, SF5, F2**
- Diameter Tolerance: +0/-0.1mm
- Focal Length:  $\pm 1\%$
- Centration: 3 arc minutes
- Clear Aperture: >90%

- Surface Quality: 60/40
- Bevel: 0.25mm x 45°

Dia.(mm)	EFL(mm)	Radius(mm)	CT(mm)	ET(mm)	Material	Part No.
6.20	25.40	13.29	1.30	0.90	B270	LPC3001
6.20	33.00	17.26	1.40	1.10	B270	LPC3002
6.20	38.00	19.88	1.80	1.50	B270	LPC3003
6.20	50.00	26.15	1.30	1.10	B270	LPC3004
6.30	31.70	16.58	1.60	1.30	B270	LPC3005
6.40	4.70	3.73	3.00	1.20	SF11	LPC3006
6.90	15.20	7.95	2.00	1.20	B270	LPC3007
7.00	31.00	16.21	1.80	1.50	B270	LPC3008
7.60	9.70	5.07	2.30	0.50	B270	LPC3009
8.00	17.00	8.89	2.30	1.40	B270	LPC3010
8.00	38.00	19.88	3.00	2.00	B270	LPC3011
9.50	25.40	13.29	2.90	2.00	B270	LPC3012
10.00	31.00	16.21	1.90	1.10	B270	LPC3013
11.00	30.00	15.69	1.80	1.00	B270	LPC3014
12.00	12.00	9.42	4.00	1.84	SF11	LPC3015
12.00	31.00	16.21	2.60	1.40	B270	LPC3016
12.00	175.50	137.72	4.00	3.90	SF11	LPC3017
12.00	200.70	157.49	4.00	3.90	SF11	LPC3018
12.40	14.50	7.61	4.80	1.20	B270	LPC3019
12.50	24.00	12.55	3.20	1.50	B270	LPC3020
12.50	38.00	19.88	2.60	1.60	B270	LPC3021
12.70	52.90	41.88	4.00	3.50	SF11	LPC3022
12.70	60.00	47.44	4.00	3.60	SF11	LPC3023
12.70	105.40	83.50	4.00	3.80	SF11	LPC3024
12.70	120.20	94.32	4.00	3.80	SF11	LPC3025
14.20	52.20	27.43	1.80	0.90	B270	LPC3026
15.00	15.00	10.09	5.50	2.16	SF5	LPC3027
15.00	22.50	15.12	3.35	1.36	SF5	LPC3028
15.00	125.00	65.38	1.40	1.00	B270	LPC3029
17.10	72.70	38.07	2.60	1.60	B270	LPC3030
17.80	31.00	16.21	3.80	1.10	B270	LPC3031
18.00	196.20	153.96	4.00	3.70	SF11	LPC3032
20.00	33.00	17.26	4.70	1.50	B270	LPC3033

20.00	38.00	19.88	3.90	1.20	B270	LPC3034
20.00	46.50	24.32	3.20	1.00	B270	LPC3035
22.30	57.50	45.12	3.40	2.00	SF11	LPC3036
23.50	31.90	16.68	6.20	1.40	B270	LPC3037
24.00	32.00	16.74	7.00	1.70	B270	LPC3038
25.00	140.00	70.61	3.10	2.00	B270	LPC3039
30.00	63.00	32.95	5.00	1.40	B270	LPC3040
30.00	75.00	39.23	3.80	0.80	B270	LPC3041
30.00	89.00	46.55	4.70	2.10	B270	LPC3042
31.50	40.00	20.92	9.30	2.20	B270	LPC3043
38.10	223.00	138.73	5.00	3.70	F2	LPC3044
39.50	333.00	172.67	3.00	1.90	B270	LPC3045
40.00	63.00	32.95	7.70	1.00	B270	LPC3046
40.00	76.00	39.75	6.40	1.00	B270	LPC3047
41.00	60.00	31.38	8.50	0.90	B270	LPC3048
47.50	92.00	48.12	8.00	1.70	B270	LPC3049
50.00	55.00	28.77	15.80	1.00	B270	LPC3050
50.00	63.00	32.95	12.50	1.50	B270	LPC3051
50.00	90.00	47.07	8.40	1.20	B270	LPC3052
50.00	120.00	62.76	7.30	2.10	B270	LPC3053
50.00	150.00	78.46	6.00	2.00	B270	LPC3054
50.00	160.00	83.68	6.40	2.30	B270	LPC3055
60.00	135.00	70.61	8.70	2.50	B270	LPC3056
65.00	100.00	52.30	13.30	2.00	B270	LPC3057
90.00	120.00	62.76	22.00	3.00	B270	LPC3058
90.00	300.00	156.91	9.10	2.50	B270	LPC3059
90.00	400.00	209.21	7.40	2.50	B270	LPC3060
90.00	500.00	261.51	6.20	2.50	B270	LPC3061
100.00	180.00	94.14	17.40	3.00	B270	LPC3062
114.00	170.00	88.91	24.60	3.50	B270	LPC3063
140.00	230.00	120.29	26.00	3.50	B270	LPC3064
150.00	250.00	130.75	28.00	4.40	B270	LPC3065
180.00	280.00	146.46	35.00	4.10	B270	LPC3066
200.00	300.00	156.91	40.00	4.00	B270	LPC3067
200.00	380.00	198.77	30.00	3.00	B270	LPC3068
250.00	450.00	235.35	40.90	5.00	B270	LPC3069