

Meniscus Lenses

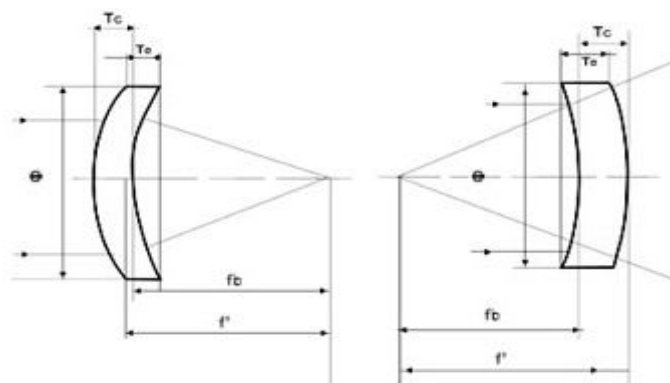
If these lenses are used in combination with other components, it is possible the focal length of the assembly, without significantly increasing the axial aberrations. Meniscus lenses are employed to greatest advantage to they are used to shorten the length the focal length of a doublet or a plano-convex lens already working at an infinite conjugate ratio.



Positive Meniscus 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: 2λ
- Bevel: $0.25\text{mm} \times 45^\circ$



Dia.(mm)	EFL(mm)	R1(mm)	R2(mm)	CT(mm)	ET(mm)	BFL(mm)	Part No.
10.00	200.00	49.03	90.00	2.50	2.00	196.52	LMP1001
20.00	100.00	33.72	90.00	3.00	2.40	96.96	LMP1002
20.00	125.00	38.47	90.00	3.00	2.40	121.67	LMP1003
25.40	100.00	32.14	82.23	3.59	1.96	96.20	LMP1004
25.40	125.00	40.60	106.90	3.26	1.98	121.59	LMP1005
25.40	150.00	49.06	131.56	3.05	1.99	146.83	LMP1006
25.40	200.00	66.15	102.19	2.79	2.00	197.13	LMP1007
25.40	250.00	83.36	233.85	2.63	2.00	247.32	LMP1008
25.40	300.00	100.89	288.20	2.52	2.00	297.45	LMP1009
25.40	400.00	136.54	402.41	2.39	2.00	397.62	LMP1010
25.40	500.00	172.92	523.89	2.31	2.00	497.73	LMP1011
25.40	1000.00	371.55	1330.72	2.16	2.00	988.02	LMP1012
30.00	150.00	42.52	90.00	4.00	3.20	145.18	LMP1013
30.00	300.00	94.08	235.00	4.00	3.20	295.64	LMP1014

40.00	200.00	49.03	90.00	4.50	3.60	193.73	LMP1015
40.00	400.00	204.95	600.00	4.50	3.60	595.50	LMP1016
50.80	100.00	30.34	65.80	9.70	1.05	89.13	LMP1017
50.80	125.00	39.17	92.88	8.22	2.41	116.08	LMP1018
50.80	150.00	47.87	119.32	7.29	2.73	142.23	LMP1019
50.80	200.00	65.16	171.60	6.18	2.92	193.55	LMP1020
50.80	250.00	82.54	224.67	5.53	2.97	244.31	LMP1021
50.80	300.00	100.08	279.12	5.10	2.98	294.80	LMP1022
50.80	400.00	135.80	393.39	5.00	3.42	394.99	LMP1023
50.80	500.00	172.33	515.73	5.00	3.74	495.05	LMP1024
50.80	1000.00	371.55	1326.30	5.00	4.37	995.57	LMP1025

Negative Meniscus Lenses

Specifications:

- Material: **BK7 Grade A Fine Annealed**
- Design Wavelength: 633nm
- Design Index: Nd=1.515082
- Diameter Tolerance: +0/-0.1mm
- Focal Length: $\pm 1\%$
- Centration: 3 arc minutes
- Clear Aperture: >90%
- Surface Quality: 60/40
- Surface Accuracy: 2λ
- Bevel: 0.25mm x 45°

Dia.(mm)	EFL(mm)	R1(mm)	R2(mm)	CT(mm)	ET(mm)	BFL(mm)	Part No.
10.00	-100.00	90.00	32.59	2.50	2.00	-99.05	LMN1001
10.00	-200.00	90.00	47.73	2.50	2.00	-198.10	LMN1002
20.00	-100.00	90.00	32.53	3.00	2.40	-98.86	LMN1003
20.00	-125.00	90.00	37.26	3.00	2.40	-123.58	LMN1004
25.40	-100.00	100.00	33.70	3.00	4.70	-99.00	LMN1005
25.40	-125.00	100.00	38.80	3.00	4.30	-123.70	LMN1006
25.40	-150.00	100.00	43.10	3.00	4.10	-148.50	LMN1007
25.40	-200.00	100.00	50.20	3.00	3.80	-198.00	LMN1008
25.40	-250.00	100.00	55.70	3.00	3.70	-247.50	LMN1009
25.40	-300.00	250.00	95.10	3.00	3.50	-298.80	LMN1010

25.40	-400.00	250.00	112.50	3.00	3.40	-398.40	LMN1011
25.40	-500.00	250.00	126.30	3.00	3.30	-498.00	LMN1012
25.40	-1000.00	500.00	253.20	3.00	3.20	-998.00	LMN1013
30.00	-150.00	90.00	41.09	4.00	3.20	-147.72	LMN1014
30.00	-300.00	235.00	93.07	4.00	3.20	-298.26	LMN1015
40.00	-200.00	90.00	47.37	4.50	3.60	-196.58	LMN1016
40.00	-400.00	600.00	204.40	4.50	3.60	-598.46	LMN1017
50.80	-100.00	200.00	40.61	5.00	12.30	-99.15	LMN1018
50.80	-125.00	200.00	48.28	5.00	10.60	-123.90	LMN1019
50.80	-150.00	200.00	55.26	5.00	9.56	-148.74	LMN1020
50.80	-200.00	200.00	67.41	5.00	8.35	-198.28	LMN1021
50.80	-250.00	200.00	77.67	5.00	7.65	-247.78	LMN1022
50.80	-300.00	300.00	101.41	5.00	7.16	-298.28	LMN1023
50.80	-400.00	300.00	121.45	5.00	6.61	-397.69	LMN1024
50.80	-500.00	300.00	137.80	5.00	6.28	-497.21	LMN1025
50.80	-1000.00	300.00	252.87	5.00	5.63	-996.73	LMN1026