

Optical Lenses

Plano-Convex Lenses

Specifications:

Material: BK7 grade A optical glass

Design wavelength: 546.1nm

Design index: 1.5183±0.0005(BK7)

Diameter tolerance: +0.0, -0.15mm

Paraxial focal length: ±2%

Centration: 3 arc minutes

Clear aperture: 90% of the diameter

Surface quality: 60-40 scratch and dig

Bevel: 0.25mmx45°

Part number	f (mm)	φ (mm)	R ₁ (mm)	t _c (mm)	t _e (mm)	f _b (mm)
PCL0101	8.0	6.0	4.15	3.3	2.0	5.8
PCL0104	10.0	6.0	5.18	3.0	2.0	8.0
PCL0102	12.0	6.0	6.22	2.8	2.0	10.2
PCL0103	18.0	6.0	9.33	2.5	2.0	16.4
PCL0105	10.0	8.0	5.18	3.1	2.0	8.0
PCL0106	18.0	8.0	9.33	2.9	2.0	16.1
PCL0209	15.0	10.0	7.78	3.8	2.0	12.5
PCL0210	22.0	10.0	11.40	3.1	1.9	20.0
PCL0201	15.0	12.7	7.78	5.3	2.0	11.5
PCL0202	20.0	12.7	10.37	4.2	2.0	17.2
PCL0203	25.0	12.7	12.96	3.7	2.0	22.6
PCL0204	30.0	12.7	15.55	3.4	2.0	27.8
PCL0205	40.0	12.7	20.73	3.0	2.0	38.0
PCL0206	50.0	12.7	25.92	2.8	2.0	48.2
PCL0207	75.0	12.7	38.87	2.5	2.0	73.4
PCL0208	100.0	12.7	51.83	2.4	2.0	98.4
PCL0330	40.0	20.0	20.73	4.5	1.9	37.0
PCL0332	40.0	22.4	20.73	5.3	2.0	36.5
PCL0333	50.0	22.4	25.92	4.6	2.0	47.0
PCL0334	60.0	22.4	31.10	4.1	2.0	57.3

Part number	f (mm)	φ (mm)	R ₁ (mm)	t _c (mm)	t _e (mm)	f _b (mm)
PCL0335	100.0	22.4	51.83	3.2	2.0	97.9
PCL0314	25.4	25.4	13.17	11.7	2.0	17.7
PCL0301	35.0	25.4	18.14	7.2	2.0	30.3
PCL0302	50.0	25.4	25.92	5.3	2.0	46.5
PCL0315	60.0	25.4	31.10	4.7	2.0	56.9
PCL0316	70.0	25.4	36.28	4.3	2.0	67.2
PCL0303	75.0	25.4	38.87	4.1	2.0	72.3
PCL0304	100.0	25.4	51.83	3.6	2.0	97.6



PCL0305	125.0	25.4	64.79	3.3	2.0	122.8
PCL0306	150.0	25.4	77.75	3.0	2.0	148.0
PCL0317	152.4	25.4	78.99	3.0	2.0	150.4
PCL0307	175.0	25.4	90.70	2.9	2.0	173.1
PCL0308	200.0	25.4	103.66	2.8	2.0	198.2
PCL0309	250.0	25.4	129.58	2.6	2.0	248.3
PCL0310	300.0	25.4	155.49	2.5	2.0	298.4
PCL0311	500.0	25.4	259.15	2.3	2.0	498.5
PCL0312	1000.0	25.4	518.30	2.2	2.0	998.6
PCL0425	80.0	30.0	41.46	4.8	2.0	76.8
PCL0428	100.0	30.0	51.83	4.2	2.0	97.2
PCL0430	120.0	30.0	62.25	3.8	2.0	117.5
PCL0435	300.0	30.0	155.62	3.8	3.1	297.5
PCL0401	50.0	38.0	25.92	11.3	3.0	42.6
PCL0408	75.0	38.0	38.87	8.0	3.0	69.7
PCL0402	100.0	38.0	51.83	6.6	3.0	95.7
PCL0403	150.0	38.0	77.75	5.3	3.0	146.5
PCL0404	200.0	38.0	103.66	4.8	3.0	196.8
PCL0405	350.0	38.0	181.41	4.0	3.0	347.4
PCL0406	500.0	38.0	259.15	3.7	3.0	497.6
PCL0407	700.0	38.0	362.81	3.5	3.0	697.7
PCL0501	100.0	50.0	51.83	9.4	3.0	93.8
PCL0502	150.0	50.0	77.75	7.1	3.0	145.3
PCL0503	200.0	50.0	103.66	6.1	3.0	196.0
PCL0504	250.0	50.0	129.58	5.4	3.0	246.4
PCL0511	300.0	50.0	155.49	5.0	3.0	296.7
PCL0505	400.0	50.0	207.32	4.5	3.0	397.0
PCL0506	450.0	50.0	233.24	4.3	3.0	447.2
PCL0507	500.0	50.0	259.15	4.2	3.0	497.2
PCL0508	600.0	50.0	310.98	4.0	3.0	597.2
PCL0509	800.0	50.0	414.64	3.8	3.0	797.5
PCL0510	1000.0	50.0	518.30	3.1	2.5	998.0

Double-Convex Lenses

Specifications:

Material: BK7 grade A optical glass

Design wavelength: 546.1nm

Design index: 1.5183±0.0005(BK7)

Diameter tolerance: +0.0, -0.15mm

Paraxial focal length: ±2%

Centration: 3 arc minutes

Clear aperture: 90% of the diameter

Surface quality: 60-40 scratch and dig

Bevel: 0.25mmX 45°



Part number	F (mm)	ϕ (mm)	$R_1=R_2$ (mm)	t_c (mm)	t_e (mm)	f_b (mm)
DCL0101	8.0	6.0	7.70	3.2	2.0	6.9
DCL0102	12.0	6.0	11.95	2.7	2.0	11.1
DCL0103	18.0	6.0	18.22	2.5	2.0	17.2
DCL0104	10.0	10.0	9.45	4.9	2.0	8.2
DCL0105	15.0	12.7	14.66	4.9	2.0	13.3
DCL0106	20.0	12.7	20.01	4.0	2.0	18.6
DCL0107	25.0	12.7	25.28	3.6	2.0	23.8
DCL0108	30.0	12.7	30.52	3.3	2.0	28.9
DCL0109	40.0	12.7	40.95	3.0	2.0	39.0
DCL0110	50.0	12.7	51.35	2.8	2.0	49.1
DCL0201	75.0	12.7	77.30	2.6	2.0	74.1
DCL0202	100.0	12.7	103.25	2.4	2.0	99.2
DCL0203	40.0	22.4	40.57	5.1	1.9	38.3
DCL0204	31.7	25.4	31.56	7.3	2.0	29.2
DCL0205	35.0	25.4	35.09	6.8	2.0	32.7
DCL0206	50.0	25.4	50.92	5.2	2.0	48.3
DCL0207	75.0	25.4	77.04	4.1	2.0	73.6
DCL0208	100.0	25.4	103.05	3.6	2.0	98.8
DCL0209	125.0	25.4	129.02	3.3	2.0	123.9
DCL0210	150.0	25.4	154.97	3.0	2.0	149.0
DCL0301	175.0	25.4	180.91	2.9	2.0	174.0
DCL0302	200.0	25.4	206.84	2.8	2.0	199.0
DCL0303	250.0	25.4	258.70	2.6	2.0	249.1
DCL0304	300.0	25.4	310.55	2.5	2.0	299.2
DCL0305	500.0	25.4	517.92	2.3	2.0	499.2
DCL0306	1000.0	25.4	1036.23	2.2	2.0	999.3
DCL0307	50.0	38.0	49.97	10.5	3.0	46.4
DCL0308	100.0	38.0	102.52	6.5	3.0	97.8
DCL0309	150.0	38.0	154.57	5.4	3.0	148.2
DCL0310	200.0	38.0	206.51	4.8	3.0	198.4
DCL0401	350.0	38.0	362.13	4.0	3.0	348.7
DCL0402	500.0	38.0	517.67	3.7	3.0	498.8
DCL0403	700.0	38.0	725.02	3.5	3.0	698.8
DCL0404	63.5	40.0	64.38	8.3	1.9	60.7
DCL0405	100.0	50.0	102.06	9.2	3.0	96.6
DCL0406	150.0	50.0	154.27	7.1	3.0	147.6
DCL0407	200.0	50.0	206.28	6.0	3.0	198.0
DCL0408	250.0	50.0	258.22	5.4	3.0	248.2
DCL0409	400.0	50.0	413.87	4.5	3.0	398.5
DCL0410	450.0	50.0	465.73	4.3	3.0	448.6
DCL0501	500.0	50.0	517.58	4.2	3.0	498.6
DCL0502	600.0	50.0	621.28	4.0	3.0	598.7
DCL0503	800.0	50.0	828.64	3.8	3.0	798.7

Plano-Concave Lenses
Specifications:
Material: BK7 grade A optical glass

Design wavelength: 546.1nm

Design index: 1.5183±0.0005(BK7)

Diameter tolerance: +0.0, -0.15mm

Paraxial focal length: ±2%

Centration: 3 arc minutes

Clear aperture: 90% of the diameter

Surface quality: 60-40 scratch and dig

Bevel: 0.25mmX 45°

Part number	f (mm)	φ (mm)	R ₁ (mm)	t _c (mm)	t _e (mm)	f _b (mm)
PCL0101	-8.0	6.0	4.15	2.0	3.3	-9.3
PCL0102	-10.0	6.0	5.18	2.0	2.9	-11.3
PCL0103	-12.0	6.0	6.22	2.0	2.8	-13.3
PCL0104	-18.0	6.0	9.33	2.0	2.5	-19.3
PCL0105	-15.0	8.0	7.77	2.0	3.0	-16.3
PCL0106	-20.0	10.0	10.37	2.0	3.2	-21.3
PCL0107	-15.0	12.7	7.78	2.0	5.3	-16.3
PCL0108	-20.0	12.7	10.37	2.0	4.1	-21.3
PCL0109	-25.0	12.7	12.96	2.0	3.7	-26.3
PCL0110	-30.0	12.7	15.55	2.0	3.4	-31.3
PCL0201	-40.0	12.7	20.73	2.0	3.0	-41.3
PCL0202	-50.0	12.7	25.92	2.0	2.8	-51.3
PCL0203	-75.0	12.7	38.87	2.0	2.5	-76.3
PCL0204	-100.0	12.7	51.83	2.0	2.3	-101.3
PCL0205	-75.0	15.0	38.87	2.0	2.7	-76.3
PCL0206	-40.0	21.0	20.73	2.0	4.7	-41.3
PCL0207	-100.0	22.4	51.83	2.0	3.2	-101.3
PCL0208	-35.0	25.4	18.14	2.0	7.2	-36.3
PCL0209	-50.0	25.4	25.92	2.0	5.3	-51.3
PCL0210	-70.0	25.4	36.28	2.0	4.3	-71.3
PCL0301	-75.0	25.4	38.87	2.0	4.1	-76.3
PCL0302	-100.0	25.4	51.83	2.0	3.6	-101.3
PCL0303	-125.0	25.4	64.79	2.0	3.3	-126.3
PCL0304	-150.0	25.4	77.75	2.0	3.0	-151.3
PCL0305	-175.0	25.4	90.70	2.0	2.8	-176.3
PCL0306	-200.0	25.4	103.66	2.0	2.7	-201.3
PCL0307	-250.0	25.4	129.58	2.0	2.6	-251.3
PCL0308	-300.0	25.4	155.49	2.0	2.5	-301.3
PCL0309	-500.0	25.4	259.15	2.0	2.3	-501.3
PCL0310	-1000.0	25.4	518.30	2.0	2.2	-1001.3
PCL0401	-80.0	30.0	41.46	2.0	4.8	-81.3
PCL0402	-50.0	38.0	25.92	3.0	11.3	-52.0
PCL0403	-100.0	38.0	51.83	3.0	6.6	-102.0
PCL0404	-150.0	38.0	77.75	3.0	5.5	-152.0
PCL0405	-200.0	38.0	103.66	3.0	4.8	-202.0



PCL0406	-350.0	38.0	181.41	3.0	4.0	-352.0
PCL0407	-500.0	38.0	259.15	3.0	3.7	-502.0
PCL0408	-700.0	38.0	362.81	3.0	3.5	-702.0
PCL0409	-50.0	40.0	25.92	2.0	11.2	-51.3
PCL0410	-100.0	50.0	51.83	3.0	9.4	-102.0
PCL0501	-150.0	50.0	77.75	3.0	7.1	-152.0
PCL0502	-200.0	50.0	103.66	3.0	6.1	-202.0
PCL0503	-250.0	50.0	129.58	3.0	5.4	-252.0
PCL0504	-400.0	50.0	207.32	3.0	4.5	-402.0
PCL0505	-450.0	50.0	233.24	3.0	4.3	-452.0
PCL0506	-500.0	50.0	259.15	3.0	4.2	-502.0
PCL0507	-600.0	50.0	310.98	3.0	4.0	-602.0
PCL0508	-800.0	50.0	414.64	3.0	3.8	-802.0

Double-Concave Lenses

Specifications:

Material: BK7 grade A optical glass

Design wavelength: 546.1nm

Design index: 1.5183±0.0005(BK7)

Diameter tolerance: +0.0, -0.15mm

Paraxial focal length: ±2%

Centration: 3 arc minutes

Clear aperture: 90% of the diameter

Surface quality: 60-40 scratch and dig

Bevel: 0.25mmX 45

Part number	F (mm)	φ (mm)	R ₁ =R ₂ (mm)	t _c (mm)	t _e (mm)	f _b (mm)
DCV0101	-8.0	6.0	8.62	2.0	3.0	-8.6
DCV0102	-12.0	6.0	12.77	2.0	2.7	-12.6
DCV0103	-18.0	6.0	18.99	2.0	2.5	-18.6
DCV0104	-10.0	10.0	10.70	2.0	4.5	-10.6
DCV0105	-15.0	12.7	15.88	2.0	4.6	-15.6
DCV0106	-20.0	12.7	21.07	2.0	4.0	-20.6
DCV0107	-25.0	12.7	26.25	2.0	3.6	-25.7
DCV0108	-30.0	12.7	31.44	2.0	3.3	-30.7
DCV0109	-40.0	12.7	41.80	2.0	3.0	-40.7
DCV0110	-50.0	12.7	52.17	2.0	2.8	-50.7
DCV0201	-35.0	25.4	36.62	2.0	6.5	-35.7
DCV0202	-50.0	25.4	52.17	2.0	5.1	-50.7
DCV0203	-75.0	25.4	78.09	2.0	4.1	-75.7
DCV0204	-100.0	25.4	104.00	2.0	3.6	-100.7
DCV0205	-125.0	25.4	129.92	2.0	3.2	-125.7
DCV0206	-150.0	25.4	155.83	2.0	3.0	-150.7
DCV0207	-175.0	25.4	181.75	2.0	2.9	-175.7
DCV0208	-200.0	25.4	207.66	2.0	2.8	-200.7
DCV0209	-250.0	25.4	259.49	2.0	2.6	-250.7
DCV0210	-300.0	25.4	311.32	2.0	2.5	-300.7

To be continued

Part number	F (mm)	ϕ (mm)	$R_1=R_2$ (mm)	t_c (mm)	t_e (mm)	f_b (mm)
DCV0301	-500.0	25.4	518.64	2.0	2.3	-500.7
DCV0302	-1000.0	25.4	1036.94	2.0	2.2	-1000.7
DCV0303	-50.0	38.0	52.34	3.0	10.1	-51.0
DCV0304	-100.0	38.0	104.17	3.0	6.5	-101.0
DCV0305	-150.0	38.0	156.00	3.0	5.3	-151.0
DCV0306	-200.0	38.0	207.83	3.0	4.7	-201.0
DCV0307	-350.0	38.0	363.32	3.0	4.0	-351.0
DCV0308	-500.0	38.0	518.81	3.0	3.7	-501.0
DCV0309	-700.0	38.0	726.13	3.0	3.5	-701.0
DCV0310	-100.0	50.0	104.17	3.0	9.1	-101.0
DCV0401	-150.0	50.0	156.00	3.0	7.0	-151.0
DCV0402	-200.0	50.0	207.83	3.0	6.0	-201.0
DCV0403	-250.0	50.0	259.66	3.0	5.4	-251.0
DCV0404	-400.0	50.0	415.15	3.0	4.5	-401.0
DCV0405	-450.0	50.0	466.91	3.0	4.3	-451.0
DCV0406	-500.0	50.0	518.82	3.0	4.2	-501.0
DCV0407	-600.0	50.0	622.47	3.0	4.0	-601.0
DCV0408	-800.0	50.0	829.73	3.0	3.8	-801.0

Meniscus Lenses**Specifications:**

Material: BK7 grade A optical glass

Design wavelength: 546.1nm

Design index: 1.5183±0.0005(BK7)

Diameter tolerance: +0.0, -0.15mm

Paraxial focal length: ±2%

Centration: 3 arc minutes

Clear aperture: 90% of the diameter

Surface quality: 60-40 scratch and dig

Bevel: 0.25mmX 45°

Part number	F (mm)	ϕ (mm)	R ₁ (mm)	R ₂ (mm)	t _c (mm)	T _e (mm)	f _b (mm)
Positive Lenses							
ML0101	100.0	25.4	33.72	90.00	4.0	2.5	97.5
ML0102	125.0	25.4	38.47	90.00	4.0	2.8	121.8
ML0103	150.0	25.4	42.52	90.00	4.0	3.0	146.3
ML0104	175.0	25.4	46.05	90.00	4.0	3.1	171.2
ML0105	200.0	25.4	49.03	90.00	3.5	2.8	197.0
ML0106	250.0	25.4	83.96	235.00	3.5	2.9	246.5
ML0107	300.0	25.4	94.08	235.00	3.5	3.0	296.3
ML0108	350.0	25.4	102.90	235.00	3.5	3.1	346.0
ML0109	400.0	25.4	110.72	235.00	3.5	3.1	395.8
ML0110	500.0	25.4	123.90	235.00	3.5	3.2	495.4
ML0201	600.0	25.4	204.95	600.00	3.5	3.2	595.3
ML0202	800.0	25.4	245.39	600.00	3.5	3.3	794.5
ML0203	1000.0	25.4	278.34	600.00	3.5	3.3	993.7
ML0204	1500.0	25.4	339.05	600.00	3.5	3.4	1492.0
ML0205	2000.0	25.4	380.54	600.00	3.5	3.4	1990.2
ML0206	4000.0	25.4	466.12	600.00	3.5	3.5	3984.5
Negative Lenses							
MP0101	-100.0	25.4	90.00	32.59	3.0	4.5	-99.2
MP0102	-125.0	25.4	90.00	37.26	3.0	4.2	-123.7
MP0103	-150.0	25.4	90.00	41.42	3.0	4.0	-149.5
MP0104	-175.0	25.4	90.00	44.86	3.0	3.8	-174.6
MP0105	-200.0	25.4	90.00	47.84	3.0	3.7	-199.6
MP0106	-250.0	25.4	235.00	83.12	3.0	3.6	-248.7
MP0107	-300.0	25.4	235.00	93.13	3.0	3.5	-298.5
MP0108	-350.0	25.4	235.00	101.90	3.0	3.4	-348.3
MP0109	-400.0	25.4	235.00	109.56	3.0	3.4	-397.5
MP0110	-500.0	25.4	235.00	122.60	3.0	3.3	-496.9
MP0201	-600.0	25.4	600.00	204.08	3.0	3.2	-597.2
MP0202	-800.0	25.4	600.00	244.34	3.0	3.2	-796.2
MP0203	-1000.0	25.4	600.00	277.16	3.0	3.1	-995.3
MP0204	-1500.0	25.4	600.00	337.60	3.0	3.1	-1492.7
MP0205	-2000.0	25.4	600.00	378.82	3.0	3.1	-1988.5
MP0206	-4000.0	25.4	600.00	464.01	3.0	3.0	-3973.1

Fused Silica Plano/Double-Convex Lenses

Specifications:

Material: UV Grade Fused Silica

Design wavelength: 546.1nm

Design index: 1.46008±0.00005

Diameter tolerance: +0.0, -0.15mm

Paraxial focal length: ±2%

Centration: 3 arc minutes

Clear aperture: 90% of the diameter

Surface quality: 60-40 scratch and dig

Bevel: 0.25mmX 45°

Part number	F (mm)	ϕ (mm)	R ₁ (mm)	t _c (mm)	T _e (mm)	f _b (mm)
UV Grade Fused Silica Plano-Convex Lenses						
PCL1101	15.0	12.7	6.90	6.2	2.0	10.8
PCL1102	20.0	12.7	9.20	4.5	2.0	16.9
PCL1103	25.0	12.7	11.50	3.9	2.0	22.3
PCL1104	30.0	12.7	13.80	3.6	2.0	27.5
PCL1105	40.0	12.7	18.40	3.1	2.0	37.9
PCL1106	35.0	25.4	16.10	8.2	2.0	29.4
PCL1107	50.0	25.4	23.00	5.8	2.0	46.0
PCL1108	75.0	25.4	34.51	4.4	2.0	72.0
PCL1109	100.0	25.4	46.01	3.8	2.0	97.4
PCL1110	150.0	25.4	69.01	3.2	2.0	147.8
PCL1201	175.0	25.4	80.51	3.0	2.0	172.9
PCL1202	200.0	25.4	92.02	2.9	2.0	198.0
PCL1203	250.0	25.4	115.02	2.7	2.0	248.2
PCL1204	300.0	25.4	138.02	2.6	2.0	298.2
PCL1205	500.0	25.4	230.04	2.4	2.0	498.4
PCL1206	1000.0	25.4	460.08	2.2	2.0	998.5
PCL1207	50.0	38.0	23.00	13.0	3.0	41.1
PCL1208	100.0	38.0	46.01	7.1	3.0	95.1
PCL1209	150.0	38.0	69.01	5.7	3.0	146.1
PCL1210	200.0	38.0	92.02	5.0	3.0	196.6
PCL1301	350.0	38.0	161.03	4.1	3.0	347.2
PCL1302	500.0	38.0	230.04	3.8	3.0	497.4

Part Number	F (mm)	ϕ (mm)	R ₁ (mm)	t _c (mm)	T _e (mm)	f _b (mm)
UV Grade Fused Silica Double-Convex Lenses						
DCL1101	15.0	12.7	12.90	5.3	2.0	13.1
DCL1102	20.0	12.7	17.69	4.4	2.0	18.4
DCL1103	25.0	12.7	22.38	3.8	2.0	23.7
DCL1104	30.0	12.7	27.04	3.5	2.0	28.8
DCL1105	40.0	12.7	36.31	3.1	2.0	38.9
DCL1106	25.0	25.4	21.22	10.4	2.0	21.2
DCL1107	35.0	25.4	30.99	7.4	2.0	32.4
DCL1108	50.0	25.4	45.10	5.7	2.0	48.0
DCL1109	75.0	25.4	68.32	4.4	2.0	73.5
DCL1110	100.0	25.4	91.42	3.8	2.0	98.7
DCL1201	150.0	25.4	137.52	3.2	2.0	148.9
DCL1202	200.0	25.4	183.58	2.9	2.0	199.0
DCL1203	250.0	25.4	229.61	2.7	2.0	249.1
DCL1204	300.0	25.4	275.64	2.6	2.0	299.1
DCL1205	500.0	25.4	459.71	2.4	2.0	499.2
DCL1206	1000.0	25.4	919.82	2.2	2.0	999.2
DCL1207	50.0	38.0	44.10	11.6	3.0	45.9
DCL1208	100.0	38.0	90.90	7.0	3.0	97.6
DCL1209	150.0	38.0	137.13	5.7	3.0	148.0
DCL1210	200.0	38.0	183.13	5.0	3.0	198.3
DCL1301	350.0	38.0	321.41	4.1	3.0	348.6
DCL1302	500.0	38.0	459.48	3.8	3.0	498.7

Fused Silica Plano/Double-Concave Lenses
Specifications:
Material: UV Grade Fused Silica
Design wavelength: 546.1nm
Design index: 1.46008±0.00005
Diameter tolerance: +0.0, -0.15mm
Paraxial focal length: ±2%
Centration: 3 arc minutes
Clear aperture: 90% of the diameter
Surface quality: 60-40 scratch and dig
Bevel: 0.25mmX 45°

Part Number	F (mm)	φ (mm)	R ₁ (mm)	t _c (mm)	T _e (mm)	f _b (mm)
UV Grade Fused Silica Plano-Concave Lenses						
PCV1101	-15.0	12.7	6.90	2.0	6.2	-16.4
PCV1102	-20.0	12.7	9.20	2.0	4.5	-21.4
PCV1103	-25.0	12.7	11.50	2.0	3.9	-26.4
PCV1104	-30.0	12.7	13.80	2.0	3.5	-31.4
PCV1105	-40.0	12.7	18.40	2.0	3.1	-41.4
PCV1106	-35.0	25.4	16.10	2.0	8.2	-36.4
PCV1107	-50.0	25.4	23.00	2.0	5.8	-51.4
PCV1108	-75.0	25.4	34.51	2.0	4.4	-76.4
PCV1109	-100.0	25.4	46.01	2.0	3.8	-101.4
PCV1110	-150.0	25.4	69.01	2.0	3.2	-151.4
PCV1201	-175.0	25.4	80.51	2.0	3.0	-176.4
PCV1202	-200.0	25.4	92.02	2.0	2.9	-201.4
PCV1203	-250.0	25.4	115.02	2.0	2.7	-251.4
PCV1204	-300.0	25.4	138.02	2.0	2.6	-301.4
PCV1205	-500.0	25.4	230.04	2.0	2.4	-501.4
PCV1206	-1000.0	25.4	460.08	2.0	2.2	-1001.4
PCV1207	-50.0	38.0	23.00	3.0	13.0	-52.1
PCV1208	-100.0	38.0	46.01	3.0	7.1	-102.1
PCV1209	-150.0	38.0	69.01	3.0	5.7	-152.1
PCV1210	-200.0	38.0	92.02	3.0	5.0	-202.1
PCV1301	-350.0	38.0	161.03	3.0	4.1	-352.1
PCV1302	-500.0	38.0	230.04	3.0	3.8	-502.1



Part Number	F (mm)	ϕ (mm)	R ₁ (mm)	t _c (mm)	T _e (mm)	f _b (mm)
UV Grade Fused Silica Double-Concave Lenses						
DCV1101	-15.0	12.7	14.11	2.0	5.0	-15.7
DCV1102	-20.0	12.7	18.71	2.0	4.2	-20.7
DCV1103	-25.0	12.7	23.32	2.0	3.7	-25.7
DCV1104	-30.0	12.7	27.92	2.0	3.5	-30.7
DCV1105	-40.0	12.7	37.12	2.0	3.1	-40.7
DCV1106	-25.0	25.4	23.32	2.0	9.5	-25.7
DCV1107	-35.0	25.4	32.52	2.0	7.2	-35.7
DCV1108	-50.0	25.4	46.32	2.0	5.6	-50.7
DCV1109	-75.0	25.4	69.33	2.0	4.3	75.7
DCV1110	-100.0	25.4	92.33	2.0	3.8	-100.7
DCV1201	-150.0	25.4	138.34	2.0	3.2	-150.7
DCV1202	-200.0	25.4	184.35	2.0	2.9	-200.7
DCV1203	-250.0	25.4	230.36	2.0	2.7	-250.7
DCV1204	-300.0	25.4	276.36	2.0	2.6	-300.7
DCV1205	-500.0	25.4	460.40	2.0	2.4	-500.7
DCV1206	-1000.0	25.4	920.48	2.0	2.2	-1000.7
DCV1207	-50.0	38.0	46.48	3.0	11.1	-51.0
DCV1208	-100.0	38.0	92.49	3.0	6.9	-101.0
DCV1209	-150.0	38.0	138.50	3.0	5.6	-151.0
DCV1210	-200.0	38.0	184.50	3.0	5.0	-201.0
DCV1301	-350.0	38.0	322.53	3.0	4.1	-351.0
DCV1302	-500.0	38.0	460.55	3.0	3.8	-501.0

Sapphire Plano-Convex/Concave Lenses
Specifications:
Material: Optical Grade Sapphire Crystal
Transmission range: 0.15um to 5.5um
Design wavelength: 546.1nm
Design index: 1.771@546.1um
Diameter tolerance: +0.0, -0.15mm
Paraxial focal length: ±2%
Centration: < 3 arc minutes
Clear aperture: 90% of the diameter
Surface quality: 80-50 scratch and dig
Bevel: 0.25mmX 45°

Part Number	F (mm)	φ (mm)	R ₁ (mm)	t _c (mm)	T _e (mm)	f _b (mm)
Sapphire Plano-Convex Lenses						
PCX2201	5.0	5.0	3.86	2.9	2.0	3.4
PCX2202	10.0	10.0	7.71	3.8	2.0	7.9
PCX2203	20.0	10.0	15.42	2.8	2.0	18.4
PCX2204	25.0	10.0	19.28	2.7	2.0	23.5
PCX2205	50.0	20.0	38.55	3.3	2.0	48.1
PCX2206	100.0	20.0	77.10	2.7	2.0	98.5
PCX2207	150.0	20.0	115.65	2.4	2.0	148.6
PCX2208	200.0	20.0	154.20	2.3	2.0	198.7
Sapphire Plano-Concave Lenses						
PCV2201	5.0	5.0	-3.86	2.0	2.9	3.9
PCV2202	10.0	10.0	-7.71	2.0	3.8	8.9
PCV2203	20.0	10.0	-15.42	2.0	2.8	18.9
PCV2204	25.0	10.0	-19.28	2.0	2.7	23.9
PCV2205	50.0	20.0	-38.55	2.0	3.3	48.9
PCV2206	100.0	20.0	-77.10	2.0	2.7	98.9
PCV2207	150.0	20.0	-115.65	2.0	2.4	148.9
PCV2208	200.0	20.0	-154.20	2.0	2.3	198.9

CaF₂ Plano-Convex/Concave Lenses
Specifications:
Material: Optical Grade CaF₂ Single Crystal
Transmission range: 200nm to 10um
Design wavelength: 1.5um, n=1.425
Diameter tolerance: +0.0, -0.15mm
Paraxial focal length: ±2%
Centration: 3 arc minutes
Clear aperture: 90% of the diameter
Surface quality: 80-50 scratch and dig
Bevel: 0.25mmX 45°

Part Number	F (mm)	φ (mm)	R ₁ (mm)	t _c (mm)	T _e (mm)	f _b (mm)
CaF₂ Plano-Convex Lenses						
PCX3201	5.0	25.4	21.25	6.2	2.0	45.6
PCX3202	100.0	25.4	42.50	3.9	2.0	97.3
PCX3203	150.0	25.4	63.75	3.3	2.0	147.7
PCX3204	200.0	25.4	85.00	3.0	2.0	197.9
PCX3205	300.0	25.4	127.50	2.6	2.0	298.2
PCX3206	500.0	25.4	212.50	2.4	2.0	498.2
PCX3207	1000.0	25.4	425.00	2.2	2.0	998.5
PCX3208	100.0	50.0	42.50	11.1	3.0	92.2
PCX3209	150.0	50.0	63.75	8.1	3.0	144.3
PCX3210	200.0	50.0	85.00	6.8	3.0	195.2
PCX3301	500.0	50.0	212.50	4.5	3.0	496.8
PCX3302	1000.0	50.0	425.00	3.7	3.0	997.4
CaF₂ Plano-Concave Lenses						
PCV3201	-100.0	25.4	42.50	2.0	3.9	-101.4
PCV3202	-200.0	25.4	85.00	2.0	3.0	-201.4
PCV3203	-500.0	25.4	212.50	2.0	2.4	-501.4
PCV3204	-1000.0	25.4	425.00	2.0	2.2	-1001.4

BK7 Plano-Convex Cylindrical Lenses
Specifications:
Material: BK7 grade A optical glass

Design wavelength: 632.8nm, n=1.5147

Surface figure: X: $\lambda/4$; Y: $\lambda/2$
Diameter tolerance: ± 0.2 mm

Paraxial focal length: $\pm 2\%$
Centration: 3 arc minutes

Clear aperture: 90%

Surface quality: 60-40 scratch and dig

Bevel: 0.25mmX 45°

Part Number	XxY (mm)	F (mm)	R ₁ (mm)	t _c (mm)	T _e (mm)	f _b (mm)
PCC0101	10.0X10.0	12.7	6.54	4.3	2.0	9.8
PCC0102	20.0X10.0	12.7	6.54	4.3	2.0	9.8
PCC0103	10.0X10.0	20.0	10.29	3.3	2.0	17.8
PCC0104	20.0X10.0	20.0	10.29	3.3	2.0	17.8
PCC0105	10.0X10.0	25.0	12.87	3.0	2.0	23.0
PCC0106	20.0X10.0	25.0	12.87	3.0	2.0	23.0
PCC0107	20.0X20.0	50.0	25.73	4.0	2.0	47.3
PCC0108	40.0X20.0	50.0	25.73	4.0	2.0	47.3
PCC0109	20.0X20.0	75.0	38.60	3.3	2.0	72.8
PCC0110	40.0X20.0	75.0	38.60	3.3	2.0	72.8
PCC0201	20.0X20.0	100.0	51.47	4.0	3.0	97.3
PCC0202	40.0X20.0	100.0	51.47	4.0	3.0	97.3
PCC0203	20.0X20.0	150.0	77.20	3.7	3.0	147.5
PCC0204	40.0X20.0	150.0	77.20	3.7	3.0	147.5
PCC0205	20.0X20.0	200.0	102.93	3.5	3.0	197.7
PCC0206	40.0X20.0	200.0	102.93	3.5	3.0	197.7
PCC0207	20.0X20.0	250.0	128.67	3.4	3.0	247.7
PCC0208	40.0X20.0	250.0	128.67	3.4	3.0	247.7
PCC0209	20.0X20.0	300.0	154.40	3.3	3.0	297.8
PCC0210	40.0X20.0	300.0	154.40	3.3	3.0	297.8
PCC0301	20.0X20.0	500.0	257.33	3.2	3.0	497.9
PCC0302	40.0X20.0	500.0	257.33	3.2	3.0	497.9
PCC0303	20.0X20.0	1000.0	514.66	3.1	3.0	997.9
PCC0304	40.0X20.0	1000.0	514.66	3.1	3.0	997.9

BK7 Plano-Concave Cylindrical Lenses
Specifications:
Material: BK7 grade A optical glass

Design wavelength: 632.8nm, n=1.5147

Surface figure: X: $\lambda/4$; Y: $\lambda/2$
Diameter tolerance: ± 0.2 mm

Paraxial focal length: $\pm 2\%$
Centration: 3 arc minutes

Clear aperture: 90%

Surface quality: 60-40 scratch and dig

Bevel: 0.25mmX 45°

Part Number	XxY (mm)	F (mm)	R ₁ (mm)	t _e (mm)	T _c (mm)	f _b (mm)
PCV0101	10.0X10.0	-12.7	6.54	4.3	2.0	-14.0
PCV0102	20.0X10.0	-12.7	6.54	4.3	2.0	-14.0
PCV0103	10.0X10.0	-25.0	12.87	3.0	2.0	-26.3
PCV0104	20.0X10.0	-25.0	12.87	3.0	2.0	-26.3
PCV0105	20.0X20.0	-50.0	25.73	4.0	2.0	-51.3
PCV0106	40.0X20.0	-50.0	25.73	4.0	2.0	-51.3
PCV0107	20.0X20.0	-75.0	38.60	3.3	2.0	-76.3
PCV0108	40.0X20.0	-75.0	38.60	3.3	2.0	-76.3
PCV0109	20.0X20.0	-100.0	51.47	4.0	3.0	-102.0
PCV0110	40.0X20.0	-100.0	51.47	4.0	3.0	-102.0
PCV0201	20.0X20.0	-150.0	77.20	3.7	3.0	-152.0
PCV0202	40.0X20.0	-150.0	77.20	3.7	3.0	-152.0
PCV0203	20.0X20.0	-200.0	102.93	3.5	3.0	-202.0
PCV0204	40.0X20.0	-200.0	102.93	3.5	3.0	-202.0
PCV0205	20.0X20.0	-250.0	128.67	3.4	3.0	-252.0
PCV0206	40.0X20.0	-250.0	128.67	3.4	3.0	-252.0
PCV0207	20.0X20.0	-500.0	257.33	3.2	3.0	-502.0
PCV0208	40.0X20.0	-500.0	257.33	3.2	3.0	-502.0
PCV0209	20.0X20.0	-1000.0	514.66	3.1	3.0	-1002.0
PCV0210	40.0X20.0	-1000.0	514.66	3.1	3.0	-1002.0



Fused Silica Plano-Convex Cylindrical Lenses

Specifications:

Material: UV Grade Fused Silica

Design wavelength: 632.8nm

Design index: 1.45702±0.00005

Diameter tolerance: +0.0, -0.15mm

Paraxial focal length: ±2%

Centration: 3 arc minutes

Clear aperture: 90% of the diameter

Surface quality: 20-10 scratch and dig

Bevel: 0.25mmX 45°

Part Number	XxY (mm)	F (mm)	R ₁ (mm)	t _c (mm)	T _e (mm)	f _b (mm)
PCC1101	10.0X10.0	50.0	22.85	2.6	2.0	48.2
PCC1102	10.0X10.0	100.0	45.70	2.3	2.0	98.4
PCC1103	10.0X10.0	150.0	68.55	2.2	2.0	148.5
PCC1104	10.0X10.0	200.0	91.40	2.1	2.0	198.6
PCC1105	10.0X10.0	250.0	114.25	2.1	2.0	248.6
PCC1106	10.0X10.0	300.0	137.10	2.1	2.0	298.6