

Achromatic Lenses

Product Description:

Achromatic lenses are designed to limit the effects of chromatic and spherical aberration by using two glass materials cemented together.

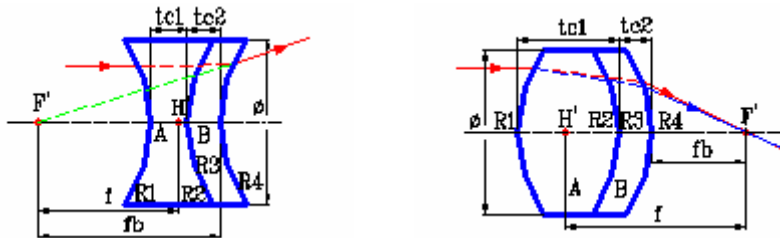
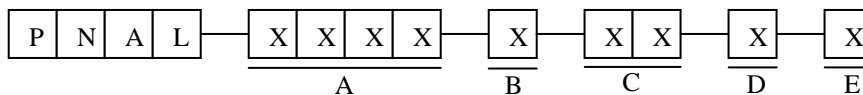


Figure 1: Schematic drawings of negative and positive achromatic lenses

Specifications:

Material	BK7 and F2 or SF5
Design Wavelength	480.0, 546.1 and 643.8 nm
Diameter Tolerance	+0.0, -0.15 mm
Paraxial Focal Length Tolerance	± 2% @ 546.1 nm
Centering Tolerance	3 arc minutes
Clear Aperture	> 85%
Bevel	0.25mm X 45°
Surface Quality	40~20
AR coating	Specified by customer

Ordering Information for Negative Achromatic Lenses:



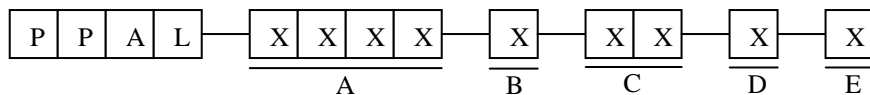
A	Central Wavelength	630=0630nm
		1310=1310nm
		XXXX=Your application wavelength
B	Material	1=BK7 and F2
		0=Special

C	Size	01=25.0X12.7X15.60X13.09X44.16X3.0X2.67X27.5
		Check standard size table for standard size
		00=Custom size
D	AR Coating	1=yes
		0=no
E	Mount	1=Yes
		0=no

Standard Size Table

Dimension P/N	-f (mm)	ϕ (mm)	-R1 (mm)	R2=R3 (mm)	R4 (mm)	tc1 (mm)	tc2 (mm)	-fb (mm)	Lens A	Lens B
01	25.0	12.7	15.60	13.09	44.16	3.0	2.67	27.5	BK7	F2
02	40.0	12.7	24.45	17.97	66.6	3.0	2.34	42.5	BK7	F2
03	50.0	25.4	31.19	24.89	85.13	3.0	4.22	53.3	BK7	F2

Ordering Information for Positive Achromatic Lenses:



A	Central Wavelength	630=0630nm
		1310=1310nm
		XXXX=Your application wavelength
B	Material	1=BK7 and F2
		0=Special
C	Size	01=15.0X6.0X8.83X6.55X19.77X2.71X1.0X13.07
		Check standard size table for standard size
		00=customized size
D	AR Coating	1=yes
		0=no
E	Mount	1=Yes
		0=no

Standard Size Table

Dimension P/N	f (mm)	ϕ (mm)	R1 (mm)	-R2=-R3 (mm)	-R4 (mm)	tc1 (mm)	tc2 (mm)	fb (mm)	Lens A	Lens B
01	15.0	6.0	8.83	6.55	19.77	2.71	1.0	13.07	BK7	SF5
02	20.0	6.0	12.36	8.51	24.38	2.6	1.0	18.29	BK7	F5
03	25.0	6.0	15.70	10.67	29.99	2.3	1.0	23.46	BK7	F5
04	30.0	6.0	18.88	12.94	36.48	1.9	1.0	28.70	BK7	F5
05	25.0	8.0	15.60	10.81	30.48	2.9	1.0	23.13	BK7	F5
06	30.0	8.0	18.88	12.88	36.22	2.7	1.0	28.28	BK7	F5
07	20.0	10.0	12.30	9.02	25.23	3.6	1.0	17.63	BK7	F5
08	25.0	12.0	15.35	11.35	31.92	4.2	1.3	22.29	BK7	F5
09	25.0	12.7	15.60	11.40	31.05	4.3	1.3	22.25	BK7	F5
10	30.0	12.7	18.54	13.49	37.84	4	1.3	27.36	BK7	F5
11	40.0	12.7	25.23	17.54	48.75	3.4	1.3	37.78	BK7	F5
12	50.0	12.7	31.26	21.93	62.37	3.1	1.3	47.99	BK7	F5
13	60.0	12.7	37.33	26.42	75.86	2.8	1.3	58.13	BK7	F5
14	75.0	12.7	46.77	32.96	94.62	2.6	1.3	73.23	BK7	F5
15	65.0	20.0	40.09	29.58	83.59	6.3	2.0	60.87	BK7	F5
16	60.0	25.4	37.33	27.16	75.86	7.0	2.0	55.57	BK7	F5
17	120.0	25.4	73.28	54.33	159.96	4.2	2.0	117.10	BK7	F5