

Achromatic Doublets

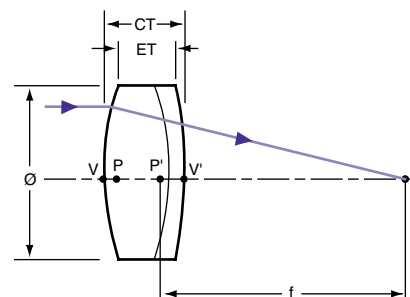
- **Superior imaging**
- **Achromatized at three wavelengths**
- **Antireflection coated for 450-750 nm**



Specifications

Material: Optical glass (crown and flint)
Design Wavelengths: 587.6, 486.1 and 656.3 nm
Focal Length Tolerance: $\pm 2\%$
Diameter Tolerance: ± 0.2 mm
Center Thickness Tolerance: ± 0.25 mm
Wedge Angle: < 5 arcmin
Surface Quality: 40-20
Coating: R $< 1.5\%$ avg per surface, 450-750 nm

Achromatic Doublets are cemented lenses comprising two different glasses, a crown and a flint glass. This provides a lens with reduced spherical aberrations and color aberration. They are used to produce sharper images than can be achieved with single element lenses.



Achromatic Doublets

Catalog Number	Focal Length, f (mm)	Diameter, Ø (mm)	Center Thickness, CT (mm)	Edge Thickness, ET (mm)	Principal Point VP (mm)	Principal Point V'P' (mm)	
34-6601	10.0	6.0	3.2	2.1	0.6	-1.5	
34-6619	16.0	8.0	3.7	2.5	0.7	-1.8	
34-6627	20.0	10.0	4.2	2.7	0.8	-2.0	
34-6635	25.0	12.5	5.5	3.6	1.0	-2.6	
34-6643	30.0	12.5	5.0	3.4	0.9	-2.4	
23-9459	35.0	12.5	5.0	3.6	0.9	-2.4	
23-9319	60.0	25.4	9.5	6.2	1.7	-4.6	
23-9335	80.0	25.4	8.2	5.8	1.5	-3.9	
23-9350	100.0	25.4	7.2	5.3	1.3	-3.4	
23-9368	120.0	25.4	7.2	5.6	1.3	-3.4	
23-9723	80.0	50.0	22.0	12.2	4.0	-11.0	
23-9731	100.0	50.0	19.0	11.3	3.3	-9.4	
23-9749	120.0	50.0	16.5	10.1	2.8	-8.1	
23-9756	200.0	50.0	12.5	8.7	2.3	-5.8	
23-9764	300.0	50.0	12.0	9.5	2.2	-5.5	
43-4084	160.0	50.8	14.5	9.6	2.6	-6.9	
43-4092	250.0	50.8	11.5	8.4	2.2	-5.2	
43-4100	400.0	50.8	10.5	8.6	2.0	-4.7	