

Achromatic Lenses are suitable for use in most high resolution imaging systems or any application where spherical and chromatic aberrations must be minimized.

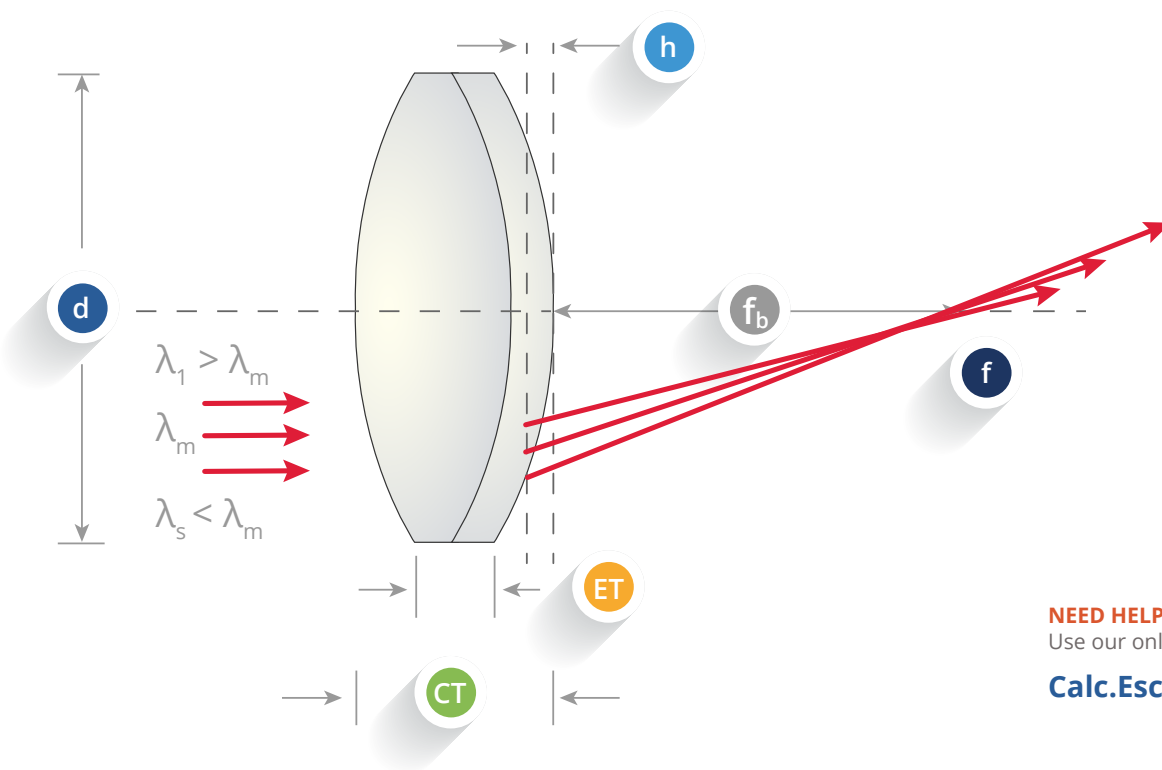
Their performance is superior to that of all single element lenses, even in monochromatic applications. Because achromats are asymmetric elements, they must be used in the proper orientation to ensure optimum performance. A general rule of thumb is that the flattest side should face toward the image.

The crown and flint glasses that compose our achromats are Grade A optical quality materials.

All standard achromatic lenses are supplied with single layer MgF₂ anti-reflection coatings on both outside surfaces. The total energy throughput exceeds 98% average across the visible spectrum.

Crown Flint Glass (Grade A)

For more information on these and other custom products or applications, please contact us at sales@EscoOptics.com or EscoOptics.com/quote.



NEED HELP WITH A CALCULATION?
Use our online optical calculator

Calc.EscoOptics.com

Focal Length Tolerance	+/- 2% at 546 nm	Surface Quality	60-40 scratch-dig
Diameter Tolerance	+/- 0.15 mm	Surface Accuracy	Better than 1λ over clear aperture
Thickness Tolerance	+/- 0.25 mm	Edges	Fine ground and beveled
Clear Aperture	80%	Coating	MgF ₂ , single layer MgF ₂
Centration	<3'		

All dimensions in mm unless otherwise specified



ACHROMATIC LENS

P/N	f_{nom}	Diameter	f/#	CT	ET	EFL ₅₈₈	BFL ₅₈₈	h_{588}
A912025	25	12.7	2.0	5.5	4.2	25.3	22.4	2.9
A912030	30	12.7	2.4	5.0	3.9	30.2	27.6	2.6
A912050	50	12.7	4.0	4.5	3.8	50.9	48.8	2.1
A925050	50	25.4	2.0	9.8	5.9	51.5	46.4	5.1
A912075	75	12.7	6.0	5.0	4.6	76.0	73.5	2.5
A925075	75	25.4	3.0	7.5	5.8	76.2	72.4	3.8
A938075	75	38.1	2.0	14.1	8.8	76.8	69.6	7.2
A912100	100	12.7	8.0	3.8	3.3	99.7	98.1	1.6
A925100	100	25.4	4.0	7.2	5.8	100.0	96.5	3.5
A938100	100	38.1	2.7	12.7	8.3	100.6	94.3	6.3
A950100	100	50.8	2.0	20.5	12.5	101.4	91.1	10.3
A912150	150	12.7	12.0	5.2	5.0	150.0	147.8	2.2
A925150	150	25.4	6.0	6.2	5.3	150.0	147.1	2.9
A938150	150	38.1	4.0	10.8	7.9	150.5	145.5	5.0
A950150	150	50.8	3.0	14.3	9.1	150.8	143.7	7.1
A925175	175	25.4	7.0	6.3	5.5	175.0	172.1	2.9
A938175	175	38.1	4.7	10.4	7.9	175.5	170.8	4.7
A950175	175	50.8	3.5	12.8	8.3	175.7	169.4	6.3
A925200	200	25.4	8.0	8.1	7.2	200.1	194.7	5.4
A938200	200	38.1	5.3	9.5	7.3	200.4	196.1	4.3
A950200	200	50.8	4.0	11.9	8.0	200.6	194.8	5.8
A925250	250	25.4	10.0	5.3	4.5	249.5	247.2	2.3
A938250	250	38.1	6.7	8.8	7.1	249.9	246.1	3.8
A950250	250	50.8	5.0	10.5	7.4	250.0	245.1	4.9
A925500	500	25.4	20.0	6.5	6.1	499.6	496.6	3.0
A938500	500	38.1	13.3	10.0	9.1	500.0	495.5	4.5
A950500	500	50.8	10.0	13.0	11.9	500.4	494.7	5.7

