

Achromatic doublet lenses

A single lens used to form an image will always show some chromatic aberration, i.e. variation of focal length with wavelength. Achromatic doublet lenses correct for this as they are constructed from two different glass types and designed to remove first order chromatic aberration. Generally spherical aberration is reduced at the same time. Achromatic doublets are probably the most economical way of achieving quality white light illumination and imaging.



Knight optical supply custom doublet lenses in various forms and quality from small 3mm dia up to 200mm dia or greater to meet a range of demanding applications. Alternatively, stock lenses can be edged down at short notice to meet your specific custom requirement.

Custom capabilities

Diameter	3mm to 200mm+
Focal length	3mm to 1000mm+
Centration	< 3 arcseconds
Surface figure	< 0.1 fringes
Scratch/dig	< 10/5
Coating options	May be AR coated for UV/VIS/NIR
Material options	Schott glass of equivalent

Notes

All products are tested in our state of the art metrology laboratory by our highly trained technicians to ensure compliance with the specification. Parts are then sent to our QA team to be cleaned and checked for surface imperfections before dispatch.

Please contact our technical sales team on (+44) 1622 849 444 to discuss your custom achromatic doublet lense requirements and discover how Knight Optical can help improve your supply chain experience. Alternatively, email us your requirements by clicking on the links below.