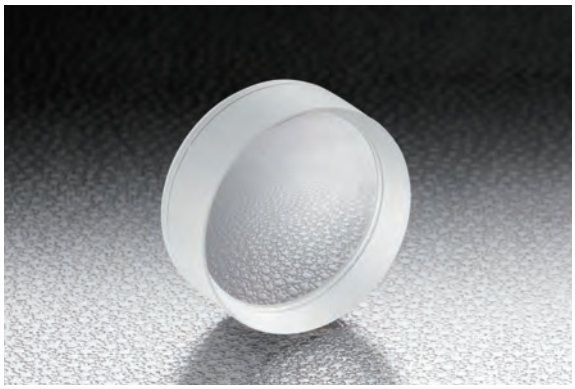
Negative Achromatic Lens | DL-NM

RoHS Catalog Code W3196

It is achromatic lens having a negative focal length.
By setting the concave one bonding two lenses wavelength dispersion of the refractive index is different, can be smaller than the spherical single lens and spherical aberration and chromatic aberration.

- It is optimized focal length shift is small in the visible light range, the aberration is minimized.
- It can be the beam expander of Galileo type in combination with achromatic lens with a focal length of the positive.



Specifications

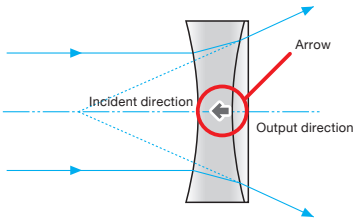
Material	N-BAF10, N-SF10
Design wavelength	486.1nm, 546.1nm, 656.3nm
Coating	Antireflection coating
Cement	Ultraviolet Hardened Adhesive
Laser Damage Threshold	0.3J/cm^2
Surface Quality (Scratch–Dig)	40–20
Clear aperture	90% of actual aperture

Guide

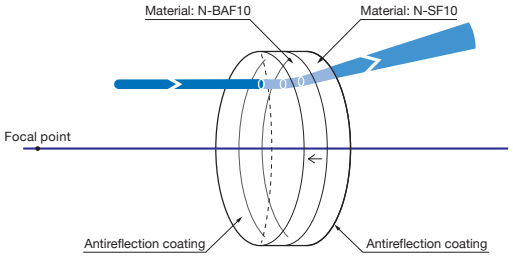
▶For custom focal lengths and diameter sizes not listed on-line or in our catalog please contact our Sales Division.

Attention

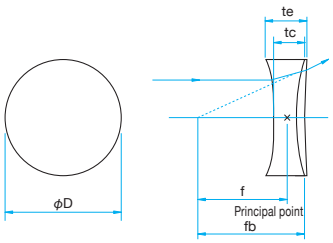
▶There is a direction to the incident parallel light to the achromatic lens. A surface with a small radius of curvature is allowed to be incident parallel light from a rear surface (the surface on the arrow is pointing to). When it is incident parallel light from the opposite side, spherical aberration and chromatic aberration will occur.
▶When used in the visible region, spherical aberration and chromatic aberration increases. In addition, the transmittance decreases.



Schematic



Outline Drawing (in mm)



●Tolerance
Diameter $\phi D^{+0}_{-0.1}$
Thickness tc±0.2
Focal length ±2%
(546.1nm)

Specifications

Part Number	Diameter ϕD [mm]	Focal length f [mm]	Edge Thickness te [mm]	Center Thickness tc [mm]	Back focal length fb [mm]	Centration [′]
DL-25-50NM	ϕ25	–49.94	9.3	6.7	–53.1	<3
DL-25-100NM	ϕ25	–99.94	5.9	4.6	–102.3	<3

Compatible Optic Mounts

LHF-25S