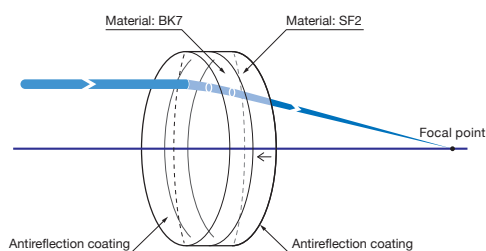


An economic general use achromatic lens suitable for an optical system, which does not require high surface quality imaging such as a microscope lens or telescope lens.

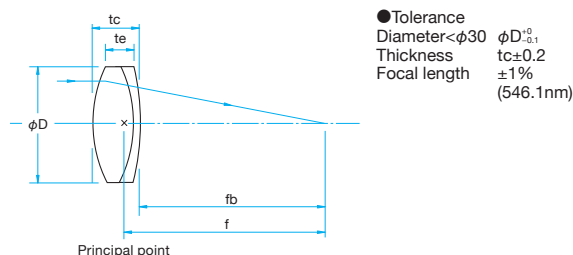


Schematic



Outline Drawing

(in mm)



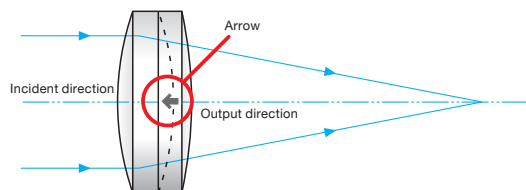
- Specification except surface quality is almost the same as DLB series. Except when used in high-precision experiment using a laser, this lens is recommended.
- It is optimized so that focal length gap is small in the visible light range and the aberration is minimized.

Specifications

Material	BK7, SF2
Design wavelength	Blue: 486.1nm, Green: 546.1nm, Red: 656.3nm
Centration	<3'
Cement	Ultraviolet Hardened Adhesive
Coating	Antireflection coating
Surface Quality (Scratch-Dig)	60-40
Clear aperture	90% of actual aperture
Laser Damage Threshold	0.3J/cm ² (Laser pulse width 10ns, repetition frequency 20Hz)

Attention

- ▶ Achromatic lens is used when focusing an image at infinity or when making the point light source to collimated light. It does not provide sufficient optical performance when used in such as short-range imaging.
- ▶ There is a direction of the incident parallel light with achromatic lens. The radius of curvature is allowed to be incident parallel light from the side of (the surface indicated by arrows) small curvature surface. If the parallel light incidents from the opposite side, then spherical aberration and chromatic aberration occur and the focused spot size will be large.



φ10 - φ20

Part Number	Diameter φD [mm]	Focal length f [mm]	Edge Thickness te [mm]	Center Thickness tc [mm]	Back focal length fb [mm]
S-DLB-10-20PM	φ10	20.0	5.1	6.7	16.6
S-DLB-10-25PM	φ10	25.0	4.9	6.1	22.1
S-DLB-10-40PM	φ10	40.0	4.6	5.3	37.5
S-DLB-10-50PM	φ10	50.0	4.4	5.0	47.5
S-DLB-10-100PM	φ10	100.5	4.2	4.5	98.1
S-DLB-15-25PM	φ15	25.2	6.0	8.8	20.7
S-DLB-15-30PM	φ15	30.1	5.7	8.0	26.0
S-DLB-15-40PM	φ15	40.1	5.2	6.9	36.5
S-DLB-15-50PM	φ15	50.1	5.0	6.3	47.1
S-DLB-15-80PM	φ15	79.9	4.7	5.5	77.1
S-DLB-15-100PM	φ15	100.0	4.5	5.2	97.3
S-DLB-20-30PM	φ20	30.6	6.8	10.9	24.9
S-DLB-20-40PM	φ20	40.1	6.2	9.2	35.3
S-DLB-20-50PM	φ20	50.2	5.7	8.1	46.0
S-DLB-20-60PM	φ20	60.2	5.4	7.4	56.6
S-DLB-20-70PM	φ20	70.1	5.2	6.9	66.7
S-DLB-20-80PM	φ20	79.9	5.1	6.6	76.6
S-DLB-20-100PM	φ20	99.5	4.9	6.1	96.4
S-DLB-20-120PM	φ20	120.3	4.7	5.7	117.3
S-DLB-20-150PM	φ20	149.8	4.6	5.4	147.0
S-DLB-20-200PM	φ20	200.1	4.5	5.1	197.3

φ25 - φ30

Part Number	Diameter φD [mm]	Focal length f [mm]	Edge Thickness te [mm]	Center Thickness tc [mm]	Back focal length fb [mm]
S-DLB-25-50PM	φ25	50.1	7.1	10.9	44.9
S-DLB-25-70PM	φ25	69.9	6.3	9.0	65.3
S-DLB-25-100PM	φ25	100.2	5.9	7.7	96.5
S-DLB-25-120PM	φ25	119.8	5.6	7.2	116.2
S-DLB-25-150PM	φ25	149.6	5.5	6.7	146.2
S-DLB-30-60PM	φ30	60.3	8.1	12.6	53.9
S-DLB-30-100PM	φ30	100.7	6.8	9.5	96.0
S-DLB-30-120PM	φ30	120.1	6.6	8.8	115.7
S-DLB-30-150PM	φ30	150.0	6.3	8.1	146.0
S-DLB-30-200PM	φ30	200.2	6.0	7.3	196.4
S-DLB-30-300PM	φ30	300.4	5.7	6.6	296.9

Compatible Optic Mounts

LHF-10S, -15S, -20S, -25S, -30S