

Plano Concave Lenses

SLB-N/SLSQ-N/SLSQK-N

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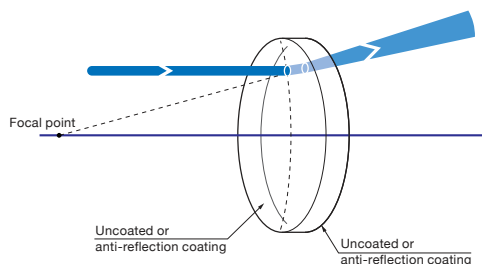
Others

These simple negative lenses have many uses. Alone they form a virtual image of a distant object or collimated light source. Used in combination with other optics they reduce the power of the system. Sharp edges which are common in negative lenses are removed by beveling in order to reduce the likelihood of chipping.

- There are three types of plano concave lenses available; BK7 for use in visible range to infrared wavelength range, synthetic fused silica for wavelengths less than 350nm ultraviolet light, and synthetic fused silica lens for excimer laser wavelengths such as KrF (248nm) and ArF (193nm).
- BK7 lenses are also available with three types of anti-reflection coatings, visible wavelength range, in the near-infrared range and in the infrared range.
- Our lenses are listed by outside diameter and focal length to assist your selection according to required specifications.

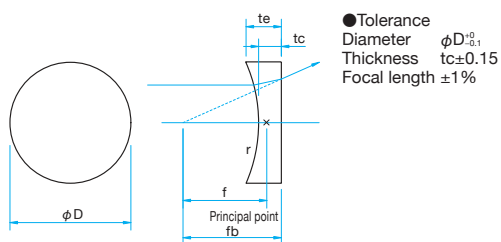


Schematic



Outline Drawing

(in mm)



Specifications

Material	SLB: BK7 SLSQ: Synthetic fused silica SLSQK: Synthetic fused silica for Excimer Laser
Design wavelength	546.1nm
Refractive index	BK7: $n_d = 1.519$ Synthetic fused silica: $n_d = 1.460$
Coating	Uncoated: the end of the part number 'N' Anti-reflection coating: the end of the part number 'NM', 'NIR1', 'NIR2'
Laser Damage Threshold	Anti-reflection coating: $4\text{J}/\text{cm}^2$ Laser pulse with 10ns, repetition frequency 20Hz
Clear aperture	90% of actual aperture (Uncoated) 85% of actual aperture (BMAR)
Surface Quality (Scratch-Dig)	20-10

Guide

- ▶ Lenses are available in a large selection and in custom sizes and focal lengths.
- ▶ In addition to our standard coating we offer custom anti-reflective coating at specific wavelengths.

Attention

- ▶ Plano concave lenses are negative lenses that diverge collimated incident light and are primarily used in conjunction with plano convex lenses to shape beams.
- ▶ The plano-concave lens has chromatic aberration, the focal length will vary depending on the wavelength. Please check the "data wavelength characteristic of the focal length" on the WEB of the focal length of each wavelength. [WEB Reference](#) [Catalog Code](#) W3050
- ▶ The plano concave lenses are designed for parallel light to be incident to the concave surface.
- ▶ Transmission losses due to reflection off the front and rear surfaces of the lens can be minimized by coating the surfaces. Consult our Sales Division for anti-reflection coatings suitable for your application.
- ▶ Sharpe edges are common in negative lenses are removed by beveling in order to reduce chipping may result in smaller then edge thickness. Thicknesses listed in tables are to theoretical sharp edge.

How to specify the anti-reflection coating

In case of specifying a anti-reflection coating 633nm – 1064nm to near infrared lens of SLB-50.8-200N.
 ⇒ SLB-50.8-200NIR1

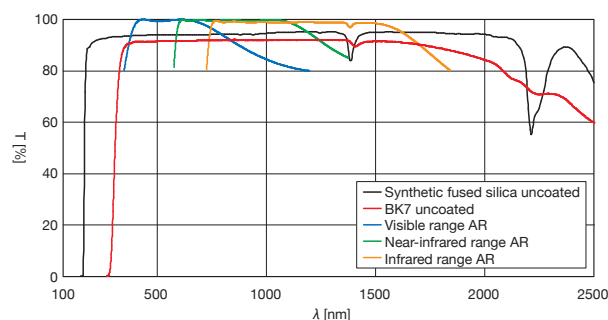
Type of AR Coat	Part Number	Wavelength Range [nm]	Transmittance [%]
Visible range	SLB-50.8-200NM	400 – 700	> Average 99
Near-infrared	SLB-50.8-200NIR1	633 – 1064	> Average 98.5
Infrared	SLB-50.8-200NIR2	750 – 1550	> Average 98.5

! Part of the above is an example of if you want to coat anti-reflective coating on the lens of the SLB-50.8-200N.

! Anti-reflection coating can be available to the lens of all of SLB.

Typical Transmittance Data

T: Transmission



BK7 $\phi 10 - \phi 25$										
Uncoated	How to specify the anti-reflection coating			Diameter ϕD [mm]	Focal length f [mm]	Edge thickness t_e [mm]	Center thickness t_c [mm]	Back focal length f_b [mm]	Radius of curvature r [mm]	Centration [']
Part Number	Visibe 400 – 700nm	Near-infrared 633 – 1064nm	Infrared 750 – 1550nm							
SLB-10-15N	M	IR1	IR2	$\phi 10$	-15	3.8	2.0	-16.3	7.79	<1
SLB-10-20N	M	IR1	IR2	$\phi 10$	-20	3.3	2.0	-21.3	10.38	<1
SLB-10-25N	M	IR1	IR2	$\phi 10$	-25	3.0	2.0	-26.3	12.98	<1
SLB-10-30N	M	IR1	IR2	$\phi 10$	-30	2.8	2.0	-31.3	15.57	<1
SLB-10-40N	M	IR1	IR2	$\phi 10$	-40	2.6	2.0	-41.3	20.76	<1
SLB-10-50N	M	IR1	IR2	$\phi 10$	-50	2.5	2.0	-51.3	25.95	<1
SLB-10-60N	M	IR1	IR2	$\phi 10$	-60	2.4	2.0	-61.3	31.14	<1
SLB-10-70N	M	IR1	IR2	$\phi 10$	-70	2.3	2.0	-71.3	36.33	<1
SLB-10-80N	M	IR1	IR2	$\phi 10$	-80	2.3	2.0	-81.3	41.52	<1
SLB-10-90N	M	IR1	IR2	$\phi 10$	-90	2.3	2.0	-91.3	46.71	<1
SLB-10-100N	M	IR1	IR2	$\phi 10$	-100	2.2	2.0	-101.3	51.90	<1
SLB-12.7-15N	M	IR1	IR2	$\phi 12.7$	-15	5.3	2.0	-16.3	7.79	<1
SLB-12.7-20N	M	IR1	IR2	$\phi 12.7$	-20	4.2	2.0	-21.3	10.38	<1
SLB-12.7-25N	M	IR1	IR2	$\phi 12.7$	-25	3.7	2.0	-26.3	12.98	<1
SLB-12.7-30N	M	IR1	IR2	$\phi 12.7$	-30	3.4	2.0	-31.3	15.57	<1
SLB-15-20N	M	IR1	IR2	$\phi 15$	-20	5.2	2.0	-21.3	10.38	<1
SLB-15-25N	M	IR1	IR2	$\phi 15$	-25	4.4	2.0	-26.3	12.98	<1
SLB-15-30N	M	IR1	IR2	$\phi 15$	-30	3.9	2.0	-31.3	15.57	<1
SLB-15-40N	M	IR1	IR2	$\phi 15$	-40	3.4	2.0	-41.3	20.76	<1
SLB-15-50N	M	IR1	IR2	$\phi 15$	-50	3.1	2.0	-51.3	25.95	<1
SLB-15-60N	M	IR1	IR2	$\phi 15$	-60	2.9	2.0	-61.3	31.14	<1
SLB-15-70N	M	IR1	IR2	$\phi 15$	-70	2.8	2.0	-71.3	36.33	<1
SLB-15-80N	M	IR1	IR2	$\phi 15$	-80	2.7	2.0	-81.3	41.52	<1
SLB-15-100N	M	IR1	IR2	$\phi 15$	-100	2.5	2.0	-101.3	51.90	<1
SLB-20-25N	M	IR1	IR2	$\phi 20$	-25	6.7	2.0	-26.3	12.98	<1
SLB-20-30N	M	IR1	IR2	$\phi 20$	-30	5.6	2.0	-31.3	15.57	<1
SLB-20-40N	M	IR1	IR2	$\phi 20$	-40	4.6	2.0	-41.3	20.76	<1
SLB-20-50N	M	IR1	IR2	$\phi 20$	-50	4.0	2.0	-51.3	25.95	<1
SLB-20-60N	M	IR1	IR2	$\phi 20$	-60	3.6	2.0	-61.3	31.14	<1
SLB-20-70N	M	IR1	IR2	$\phi 20$	-70	3.4	2.0	-71.3	36.33	<1
SLB-20-80N	M	IR1	IR2	$\phi 20$	-80	3.2	2.0	-81.3	41.52	<1
SLB-20-90N	M	IR1	IR2	$\phi 20$	-90	3.1	2.0	-91.3	46.71	<1
SLB-20-100N	M	IR1	IR2	$\phi 20$	-100	3.0	2.0	-101.3	51.90	<1
SLB-20-120N	M	IR1	IR2	$\phi 20$	-120	2.8	2.0	-121.3	62.28	<1
SLB-20-150N	M	IR1	IR2	$\phi 20$	-150	2.6	2.0	-151.3	77.85	<1
SLB-25-30N	M	IR1	IR2	$\phi 25$	-30	8.3	2.0	-31.3	15.57	<1
SLB-25-35N	M	IR1	IR2	$\phi 25$	-35	7.0	2.0	-36.3	18.17	<1
SLB-25-40N	M	IR1	IR2	$\phi 25$	-40	6.2	2.0	-41.3	20.76	<1
SLB-25-50N	M	IR1	IR2	$\phi 25$	-50	5.2	2.0	-51.3	25.95	<1
SLB-25-60N	M	IR1	IR2	$\phi 25$	-60	4.6	2.0	-61.3	31.14	<1
SLB-25-70N	M	IR1	IR2	$\phi 25$	-70	4.2	2.0	-71.3	36.33	<1
SLB-25-80N	M	IR1	IR2	$\phi 25$	-80	3.9	2.0	-81.3	41.52	<1
SLB-25-90N	M	IR1	IR2	$\phi 25$	-90	3.7	2.0	-91.3	46.71	<1
SLB-25-100N	M	IR1	IR2	$\phi 25$	-100	3.5	2.0	-101.3	51.90	<1
SLB-25-120N	M	IR1	IR2	$\phi 25$	-120	3.3	2.0	-121.3	62.28	<1
SLB-25-150N	M	IR1	IR2	$\phi 25$	-150	3.0	2.0	-151.3	77.85	<1
SLB-25-170N	M	IR1	IR2	$\phi 25$	-170	3.0	2.0	-171.3	88.23	<1
SLB-25-200N	M	IR1	IR2	$\phi 25$	-200	2.8	2.0	-201.3	103.80	<1

Compatible Optic Mounts

LHF-10S, -12.7S, -15S, -20S, -25S, -25.4S / MLH-10, -15

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Others

Plano Concave Lenses

SLB-N/SLSQ-N/SLSQK-N

Catalog Code W3051

BK7 $\phi 25.4 - \phi 50.8$

Application Systems	Uncoated	How to specify the anti-reflection coating			Diameter ϕD [mm]	Focal length f [mm]	Edge thickness t_e [mm]	Center thickness t_c [mm]	Back focal length f_b [mm]	Radius of curvature r [mm]	Centration [']
	Part Number	Visible 400 – 700nm	Near-infrared 633 – 1064nm	Infrared 750 – 1550nm							
Optics & Optical Coatings	SLB-25.4-30N	M	IR1	IR2	$\phi 25.4$	-30	8.6	2.0	-31.3	15.57	<1
	SLB-25.4-40N	M	IR1	IR2	$\phi 25.4$	-40	6.3	2.0	-41.3	20.76	<1
	SLB-25.4-50N	M	IR1	IR2	$\phi 25.4$	-50	5.3	2.0	-51.3	25.95	<1
Opto-Mechanics	SLB-25.4-60N	M	IR1	IR2	$\phi 25.4$	-60	4.7	2.0	-61.3	31.14	<1
	SLB-25.4-70N	M	IR1	IR2	$\phi 25.4$	-70	4.3	2.0	-71.3	36.33	<1
	SLB-25.4-80N	M	IR1	IR2	$\phi 25.4$	-80	4.0	2.0	-81.3	41.52	<1
Bases	SLB-25.4-90N	M	IR1	IR2	$\phi 25.4$	-90	3.8	2.0	-91.3	46.71	<1
	SLB-25.4-100N	M	IR1	IR2	$\phi 25.4$	-100	3.6	2.0	-101.3	51.90	<1
	SLB-25.4-150N	M	IR1	IR2	$\phi 25.4$	-150	3.0	2.0	-151.3	77.85	<1
Manual Stages	SLB-25.4-200N	M	IR1	IR2	$\phi 25.4$	-200	2.8	2.0	-201.3	103.80	<1
	SLB-30-35N	M	IR1	IR2	$\phi 30$	-35	9.9	2.0	-36.3	18.17	<1
	SLB-30-40N	M	IR1	IR2	$\phi 30$	-40	8.4	2.0	-41.3	20.76	<1
Actuators & Adjusters	SLB-30-50N	M	IR1	IR2	$\phi 30$	-50	6.8	2.0	-51.3	25.95	<1
	SLB-30-60N	M	IR1	IR2	$\phi 30$	-60	5.9	2.0	-61.3	31.14	<1
	SLB-30-70N	M	IR1	IR2	$\phi 30$	-70	5.2	2.0	-71.3	36.33	<1
Motorized Stages	SLB-30-80N	M	IR1	IR2	$\phi 30$	-80	4.8	2.0	-81.3	41.52	<1
	SLB-30-90N	M	IR1	IR2	$\phi 30$	-90	4.5	2.0	-91.3	46.71	<1
	SLB-30-100N	M	IR1	IR2	$\phi 30$	-100	4.2	2.0	-101.3	51.90	<1
Light Sources & Laser Safety	SLB-30-120N	M	IR1	IR2	$\phi 30$	-120	3.8	2.0	-121.3	62.28	<1
	SLB-30-150N	M	IR1	IR2	$\phi 30$	-150	3.5	2.0	-151.3	77.85	<1
	SLB-30-170N	M	IR1	IR2	$\phi 30$	-170	3.3	2.0	-171.3	88.23	<1
Index	SLB-30-200N	M	IR1	IR2	$\phi 30$	-200	3.1	2.0	-201.3	103.80	<1
	SLB-30-220N	M	IR1	IR2	$\phi 30$	-220	3.0	2.0	-221.3	114.18	<1
	SLB-30-250N	M	IR1	IR2	$\phi 30$	-250	2.9	2.0	-251.3	129.75	<1
Guide	SLB-40-50N	M	IR1	IR2	$\phi 40$	-50	11.4	2.0	-51.3	25.95	<1
	SLB-40-60N	M	IR1	IR2	$\phi 40$	-60	9.3	2.0	-61.3	31.14	<1
	SLB-40-70N	M	IR1	IR2	$\phi 40$	-70	8.0	2.0	-71.3	36.33	<1
Mirrors	SLB-40-80N	M	IR1	IR2	$\phi 40$	-80	7.1	2.0	-81.3	41.52	<1
	SLB-40-100N	M	IR1	IR2	$\phi 40$	-100	6.0	2.0	-101.3	51.90	<1
	SLB-50-70N	M	IR1	IR2	$\phi 50$	-70	13.0	3.0	-72.0	36.33	<1
Beamsplitters	SLB-50-80N	M	IR1	IR2	$\phi 50$	-80	11.4	3.0	-82.0	41.52	<1
	SLB-50-90N	M	IR1	IR2	$\phi 50$	-90	10.3	3.0	-92.0	46.71	<1
	SLB-50-100N	M	IR1	IR2	$\phi 50$	-100	9.4	3.0	-102.0	51.90	<1
Polarizers	SLB-50-120N	M	IR1	IR2	$\phi 50$	-120	8.2	3.0	-122.0	62.28	<1
	SLB-50-150N	M	IR1	IR2	$\phi 50$	-150	7.1	3.0	-152.0	77.85	<1
	SLB-50-170N	M	IR1	IR2	$\phi 50$	-170	6.6	3.0	-172.0	88.23	<1
Substrates/Windows	SLB-50-200N	M	IR1	IR2	$\phi 50$	-200	6.1	3.0	-202.0	103.80	<1
	SLB-50-220N	M	IR1	IR2	$\phi 50$	-220	5.8	3.0	-222.0	114.18	<1
	SLB-50-250N	M	IR1	IR2	$\phi 50$	-250	5.4	3.0	-252.0	129.75	<1
Optical Data	SLB-50-300N	M	IR1	IR2	$\phi 50$	-300	5.0	3.0	-302.0	155.70	<1
	SLB-50.8-70N	M	IR1	IR2	$\phi 50.8$	-70	13.4	3.0	-72.0	36.33	<1
	SLB-50.8-80N	M	IR1	IR2	$\phi 50.8$	-80	11.7	3.0	-82.0	41.52	<1
Maintenance	SLB-50.8-90N	M	IR1	IR2	$\phi 50.8$	-90	10.5	3.0	-92.0	46.71	<1
	SLB-50.8-100N	M	IR1	IR2	$\phi 50.8$	-100	9.6	3.0	-102.0	51.90	<1
	SLB-50.8-150N	M	IR1	IR2	$\phi 50.8$	-150	7.3	3.0	-152.0	77.85	<1
Selection Guide	SLB-50.8-200N	M	IR1	IR2	$\phi 50.8$	-200	6.2	3.0	-202.0	103.80	<1
	SLB-50.8-250N	M	IR1	IR2	$\phi 50.8$	-250	5.5	3.0	-252.0	129.75	<1
	SLB-50.8-300N	M	IR1	IR2	$\phi 50.8$	-300	5.1	3.0	-302.0	155.70	<1
Plano Convex Lenses	SLB-50.8-70N	M	IR1	IR2	$\phi 50.8$	-70	13.4	3.0	-72.0	36.33	<1
	SLB-50.8-80N	M	IR1	IR2	$\phi 50.8$	-80	11.7	3.0	-82.0	41.52	<1
	SLB-50.8-90N	M	IR1	IR2	$\phi 50.8$	-90	10.5	3.0	-92.0	46.71	<1
Plano Concave Lenses	SLB-50.8-100N	M	IR1	IR2	$\phi 50.8$	-100	9.6	3.0	-102.0	51.90	<1
	SLB-50.8-150N	M	IR1	IR2	$\phi 50.8$	-150	7.3	3.0	-152.0	77.85	<1
	SLB-50.8-200N	M	IR1	IR2	$\phi 50.8$	-200	6.2	3.0	-202.0	103.80	<1
Biconvex Lenses	SLB-50.8-250N	M	IR1	IR2	$\phi 50.8$	-250	5.5	3.0	-252.0	129.75	<1
	SLB-50.8-300N	M	IR1	IR2	$\phi 50.8$	-300	5.1	3.0	-302.0	155.70	<1
	SLB-50.8-70N	M	IR1	IR2	$\phi 50.8$	-70	13.4	3.0	-72.0	36.33	<1
Biconcave Lenses	SLB-50.8-80N	M	IR1	IR2	$\phi 50.8$	-80	11.7	3.0	-82.0	41.52	<1
	SLB-50.8-90N	M	IR1	IR2	$\phi 50.8$	-90	10.5	3.0	-92.0	46.71	<1
	SLB-50.8-100N	M	IR1	IR2	$\phi 50.8$	-100	9.6	3.0	-102.0	51.90	<1
Kit	SLB-50.8-150N	M	IR1	IR2	$\phi 50.8$	-150	7.3	3.0	-152.0	77.85	<1
	SLB-50.8-200N	M	IR1	IR2	$\phi 50.8$	-200	6.2	3.0	-202.0	103.80	<1
	SLB-50.8-250N	M	IR1	IR2	$\phi 50.8$	-250	5.5	3.0	-252.0	129.75	<1
Reasonable Lens	SLB-50.8-300N	M	IR1	IR2	$\phi 50.8$	-300	5.1	3.0	-302.0	155.70	<1
	SLB-50.8-70N	M	IR1	IR2	$\phi 50.8$	-70	13.4	3.0	-72.0	36.33	<1
	SLB-50.8-80N	M	IR1	IR2	$\phi 50.8$	-80	11.7	3.0	-82.0	41.52	<1
Cylindrical	SLB-50.8-90N	M	IR1	IR2	$\phi 50.8$	-90	10.5	3.0	-92.0	46.71	<1
	SLB-50.8-100N	M	IR1	IR2	$\phi 50.8$	-100	9.6	3.0	-102.0	51.90	<1
	SLB-50.8-150N	M	IR1	IR2	$\phi 50.8$	-150	7.3	3.0	-152.0	77.85	<1
Others	SLB-50.8-200N	M	IR1	IR2	$\phi 50.8$	-200	6.2	3.0	-202.0	103.80	<1
	SLB-50.8-250N	M	IR1	IR2	$\phi 50.8$	-250	5.5	3.0	-252.0	129.75	<1
	SLB-50.8-300N	M	IR1	IR2	$\phi 50.8$	-300	5.1	3.0	-302.0	155.70	<1

Compatible Optic Mounts

LHF-30S, -40S, -50S, -50.8S

Synthetic fused silica $\phi 10 - \phi 25.4$

Part Number	Diameter ϕD [mm]	Focal length f [mm]	Edge thickness t_e [mm]	Center thickness t_c [mm]	Back focal length f_b [mm]	Radius of curvature r [mm]	Centration [']
SLSQ-10-15N	$\phi 10$	-15	4.1	2.0	-16.4	6.90	<1
SLSQ-10-20N	$\phi 10$	-20	3.5	2.0	-21.4	9.20	<1
SLSQ-10-25N	$\phi 10$	-25	3.1	2.0	-26.4	11.50	<1
SLSQ-10-30N	$\phi 10$	-30	2.9	2.0	-31.4	13.80	<1
SLSQ-10-40N	$\phi 10$	-40	2.7	2.0	-41.4	18.40	<1
SLSQ-10-50N	$\phi 10$	-50	2.6	2.0	-51.4	23.00	<1
SLSQ-10-60N	$\phi 10$	-60	2.5	2.0	-61.4	27.60	<1
SLSQ-10-70N	$\phi 10$	-70	2.4	2.0	-71.4	32.20	<1
SLSQ-10-80N	$\phi 10$	-80	2.3	2.0	-81.4	36.80	<1
SLSQ-10-90N	$\phi 10$	-90	2.3	2.0	-91.4	41.40	<1
SLSQ-10-100N	$\phi 10$	-100	2.3	2.0	-101.4	46.00	<1
SLSQ-12.7-20N	$\phi 12.7$	-20	4.5	2.0	-21.4	9.20	<1
SLSQ-12.7-25N	$\phi 12.7$	-25	3.9	2.0	-26.4	11.50	<1
SLSQ-12.7-30N	$\phi 12.7$	-30	3.5	2.0	-31.4	13.80	<1
SLSQ-12.7-40N	$\phi 12.7$	-40	3.1	2.0	-41.4	18.40	<1
SLSQ-15-20N	$\phi 15$	-20	5.9	2.0	-21.4	9.20	<1
SLSQ-15-25N	$\phi 15$	-25	4.8	2.0	-26.4	11.50	<1
SLSQ-15-30N	$\phi 15$	-30	4.2	2.0	-31.4	13.80	<1
SLSQ-15-40N	$\phi 15$	-40	3.6	2.0	-41.4	18.40	<1
SLSQ-15-50N	$\phi 15$	-50	3.3	2.0	-51.4	23.00	<1
SLSQ-15-60N	$\phi 15$	-60	3.0	2.0	-61.4	27.60	<1
SLSQ-15-70N	$\phi 15$	-70	2.9	2.0	-71.4	32.20	<1
SLSQ-15-80N	$\phi 15$	-80	2.8	2.0	-81.4	36.80	<1
SLSQ-15-90N	$\phi 15$	-90	2.7	2.0	-91.4	41.40	<1
SLSQ-15-100N	$\phi 15$	-100	2.6	2.0	-101.4	46.00	<1
SLSQ-20-25N	$\phi 20$	-25	7.8	2.0	-26.4	11.50	<1
SLSQ-20-30N	$\phi 20$	-30	6.3	2.0	-31.4	13.80	<1
SLSQ-20-40N	$\phi 20$	-40	5.0	2.0	-41.4	18.40	<1
SLSQ-20-50N	$\phi 20$	-50	4.3	2.0	-51.4	23.00	<1
SLSQ-20-60N	$\phi 20$	-60	3.9	2.0	-61.4	27.60	<1
SLSQ-20-70N	$\phi 20$	-70	3.6	2.0	-71.4	32.20	<1
SLSQ-20-80N	$\phi 20$	-80	3.4	2.0	-81.4	36.80	<1
SLSQ-20-90N	$\phi 20$	-90	3.2	2.0	-91.4	41.40	<1
SLSQ-20-100N	$\phi 20$	-100	3.1	2.0	-101.4	46.00	<1
SLSQ-20-120N	$\phi 20$	-120	2.9	2.0	-121.4	55.20	<1
SLSQ-20-150N	$\phi 20$	-150	2.7	2.0	-151.4	69.00	<1
SLSQ-25-30N	$\phi 25$	-30	10.0	2.0	-31.4	13.80	<1
SLSQ-25-35N	$\phi 25$	-35	8.0	2.0	-36.4	16.10	<1
SLSQ-25-40N	$\phi 25$	-40	6.9	2.0	-41.4	18.40	<1
SLSQ-25-50N	$\phi 25$	-50	5.7	2.0	-51.4	23.00	<1
SLSQ-25-60N	$\phi 25$	-60	5.0	2.0	-61.4	27.60	<1
SLSQ-25-70N	$\phi 25$	-70	4.5	2.0	-71.4	32.20	<1
SLSQ-25-80N	$\phi 25$	-80	4.2	2.0	-81.4	36.80	<1
SLSQ-25-90N	$\phi 25$	-90	3.9	2.0	-91.4	41.40	<1
SLSQ-25-100N	$\phi 25$	-100	3.7	2.0	-101.4	46.00	<1
SLSQ-25-120N	$\phi 25$	-120	3.4	2.0	-121.4	55.20	<1
SLSQ-25-150N	$\phi 25$	-150	3.1	2.0	-151.4	69.00	<1
SLSQ-25-170N	$\phi 25$	-170	3.0	2.0	-171.4	78.20	<1
SLSQ-25-200N	$\phi 25$	-200	2.9	2.0	-201.4	92.00	<1
SLSQ-25.4-30N	$\phi 25.4$	-30	10.4	2.0	-31.4	13.80	<1
SLSQ-25.4-35N	$\phi 25.4$	-35	8.2	2.0	-36.4	16.1	<1
SLSQ-25.4-40N	$\phi 25.4$	-40	7.1	2.0	-41.4	18.40	<1
SLSQ-25.4-50N	$\phi 25.4$	-50	5.8	2.0	-51.4	23.00	<1
SLSQ-25.4-60N	$\phi 25.4$	-60	5.1	2.0	-61.4	27.60	<1
SLSQ-25.4-70N	$\phi 25.4$	-70	4.6	2.0	-71.4	32.20	<1
SLSQ-25.4-80N	$\phi 25.4$	-80	4.3	2.0	-81.4	36.80	<1
SLSQ-25.4-90N	$\phi 25.4$	-90	4.0	2.0	-91.4	41.40	<1
SLSQ-25.4-100N	$\phi 25.4$	-100	3.8	2.0	-101.4	46.00	<1
SLSQ-25.4-150N	$\phi 25.4$	-150	3.2	2.0	-151.4	69.00	<1
SLSQ-25.4-200N	$\phi 25.4$	-200	2.9	2.0	-201.4	92.00	<1

Compatible Optic Mounts

LHF-10S, -12.7S, -15S, -20S, -25S, -25.4S, -30S / MLH-10, -15

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Plano Concave Lenses

SLB-N/SLSQ-N/SLSQK-N

Catalog Code W3053

Synthetic fused silica $\phi 30 - \phi 50.8$

Part Number	Diameter ϕD [mm]	Focal length f [mm]	Edge thickness t_e [mm]	Center thickness t_c [mm]	Back focal length f_b [mm]	Radius of curvature r [mm]	Centration [']
SLSQ-30-35N	$\phi 30$	-35	12.3	2.0	-36.4	16.10	<1
SLSQ-30-40N	$\phi 30$	-40	9.7	2.0	-41.4	18.40	<1
SLSQ-30-50N	$\phi 30$	-50	7.6	2.0	-51.4	23.00	<1
SLSQ-30-60N	$\phi 30$	-60	6.4	2.0	-61.4	27.60	<1
SLSQ-30-70N	$\phi 30$	-70	5.7	2.0	-71.4	32.20	<1
SLSQ-30-80N	$\phi 30$	-80	5.2	2.0	-81.4	36.80	<1
SLSQ-30-90N	$\phi 30$	-90	4.8	2.0	-91.4	41.40	<1
SLSQ-30-100N	$\phi 30$	-100	4.5	2.0	-101.4	46.00	<1
SLSQ-30-120N	$\phi 30$	-120	4.1	2.0	-121.4	55.20	<1
SLSQ-30-150N	$\phi 30$	-150	3.7	2.0	-151.4	69.00	<1
SLSQ-30-170N	$\phi 30$	-170	3.5	2.0	-171.4	78.20	<1
SLSQ-30-200N	$\phi 30$	-200	3.2	2.0	-201.4	92.00	<1
SLSQ-30-220N	$\phi 30$	-220	3.1	2.0	-221.4	101.20	<1
SLSQ-30-250N	$\phi 30$	-250	3.0	2.0	-251.4	115.00	<1
SLSQ-40-50N	$\phi 40$	-50	13.6	2.0	-51.4	23.00	<1
SLSQ-40-60N	$\phi 40$	-60	10.6	2.0	-61.4	27.60	<1
SLSQ-40-70N	$\phi 40$	-70	9.0	2.0	-71.4	32.20	<1
SLSQ-40-100N	$\phi 40$	-100	6.6	2.0	-101.4	46.00	<1
SLSQ-40-120N	$\phi 40$	-120	5.8	2.0	-121.4	55.20	<1
SLSQ-40-150N	$\phi 40$	-150	5.0	2.0	-151.4	69.00	<1
SLSQ-40-200N	$\phi 40$	-200	4.2	2.0	-201.4	92.00	<1
SLSQ-40-250N	$\phi 40$	-250	3.8	2.0	-251.4	115.00	<1
SLSQ-50-70N	$\phi 50$	-70	14.9	3.0	-72.1	32.20	<1
SLSQ-50-80N	$\phi 50$	-80	12.8	3.0	-82.1	36.80	<1
SLSQ-50-90N	$\phi 50$	-90	11.4	3.0	-92.1	41.40	<1
SLSQ-50-100N	$\phi 50$	-100	10.4	3.0	-102.1	46.00	<1
SLSQ-50-120N	$\phi 50$	-120	9.0	3.0	-122.1	55.20	<1
SLSQ-50-150N	$\phi 50$	-150	7.7	3.0	-152.1	69.00	<1
SLSQ-50-170N	$\phi 50$	-170	7.1	3.0	-172.1	78.20	<1
SLSQ-50-200N	$\phi 50$	-200	6.5	3.0	-202.1	92.00	<1
SLSQ-50-220N	$\phi 50$	-220	6.1	3.0	-222.1	101.20	<1
SLSQ-50-250N	$\phi 50$	-250	5.8	3.0	-252.1	115.00	<1
SLSQ-50-300N	$\phi 50$	-300	5.3	3.0	-302.1	138.00	<1
SLSQ-50.8-70N	$\phi 50.8$	-70	15.4	3.0	-72.1	32.20	<1
SLSQ-50.8-80N	$\phi 50.8$	-80	13.2	3.0	-82.1	36.80	<1
SLSQ-50.8-90N	$\phi 50.8$	-90	11.7	3.0	-92.1	41.40	<1
SLSQ-50.8-100N	$\phi 50.8$	-100	10.6	3.0	-102.1	46.00	<1
SLSQ-50.8-150N	$\phi 50.8$	-150	7.8	3.0	-152.1	69.00	<1
SLSQ-50.8-200N	$\phi 50.8$	-200	6.6	3.0	-202.1	92.00	<1
SLSQ-50.8-250N	$\phi 50.8$	-250	5.8	3.0	-252.1	115.00	<1
SLSQ-50.8-300N	$\phi 50.8$	-300	5.4	3.0	-302.1	138.00	<1

Synthetic fused silica for Excimer Laser $\phi 30, \phi 50$

Part Number	Diameter D [mm]	Focal length f [mm]	Edge thickness t_e [mm]	Center thickness t_c [mm]	Back focal length f_b [mm]	Radius of curvature r [mm]	Centration [']
SLSQK-30-50N	$\phi 30$	-50	7.6	2.0	-51.4	23.00	<1
SLSQK-30-60N	$\phi 30$	-60	6.4	2.0	-61.4	27.60	<1
SLSQK-30-70N	$\phi 30$	-70	5.7	2.0	-71.4	32.20	<1
SLSQK-30-100N	$\phi 30$	-100	4.5	2.0	-101.4	46.00	<1
SLSQK-30-150N	$\phi 30$	-150	3.7	2.0	-151.4	69.00	<1
SLSQK-50-70N	$\phi 50$	-70	14.9	3.0	-72.1	32.20	<1
SLSQK-50-80N	$\phi 50$	-80	12.8	3.0	-82.1	36.80	<1
SLSQK-50-100N	$\phi 50$	-100	10.4	3.0	-102.1	46.00	<1
SLSQK-50-150N	$\phi 50$	-150	7.7	3.0	-152.1	69.00	<1
SLSQK-50-200N	$\phi 50$	-200	6.5	3.0	-202.1	92.00	<1

Compatible Optic Mounts

LHF-30S, -40S, -50S, -50.8S

Catalog Code W3054