



■ Linsensysteme

Linsensysteme minimieren die Abbildungsfehler von Einzellinsen. Sie bieten hochpräzise Fokussierung bei nicht-scannenden Anwendungen. Man unterscheidet monochromatische und achromatische Systeme.

Monochromate sind nur für eine spezielle Wellenlänge korrigiert und so für Laseranwendungen geeignet. Insbesondere Quarzoptiken als Luftspalt-System eignen sich hervorragend zur Kollimation oder Fokussierung von Hochleistungslasern. Wir bieten gefasste mehrlinsige Luftspalt-Systeme in Quarz und optischem Glas an.

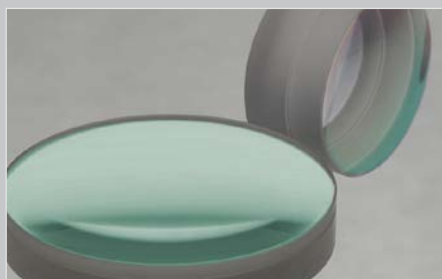
Im Gegensatz dazu bestehen achromatische Systeme immer aus Elementen mit unterschiedlichen Glassorten und Dispersionen. Dies ermöglicht die Korrektur des Farbfehlers meist für den sichtbaren Bereich. In der Regel werden die Elemente verkittet. Dies führt zu geringerer Beständigkeit gegenüber Hochleistungslasern. Empfohlen werden mittlere Leistungen von kleiner 200 Watt für diese Achromate.

■ Focusing Lenses

Multi-element lens systems minimize the imaging errors of single lenses and provide precision focusing for non-scanning applications. You have to distinguish between monochromatic and achromatic systems.

Monochromatic systems are only corrected for a specific wavelength. So they are most suitable for laser applications. Especially fused silica lenses in air-spaced design are preferably chosen for collimation or focusing of high power laser. We offer mounted air spaced multi element systems in fused silica and optical glass.

Achromatic systems have to consist of lenses with different glass types and dispersions. Only a matched combination allows the correction of the chromatic error especially in the visible range. Usually components are cemented. That leads to a reduced damage threshold of the achromatic system, which limits the use of laser with average powers of less than 200 watt.



1030 nm - 1090 nm

Artikelnummer part number	Brennweite focal length [mm]	freier-Ø clear-Ø [mm]	Außen-Ø housing-Ø [mm]	Länge length [mm]	Arbeitsabstand working distance [mm]	Anzahl Linsen number of lenses
S6ASS2020/328 ●	25.1	12.5	25.0	13.5	19.8	3
S6ASS2550/328	49.7	23.0	30.0	20.0	48.4	2
S6ASS2560/328	59.9	23.0	30.0	22.5	57.5	2
S6ASS2060/328 ●	63.9	34.0	40.0	32.0	49.3	3
S6ASS5080/328	79.6	48.0	54.0	36.0	60.2	3
S6ASS1093/328 ●	100.6	42.0	48.0	22.0	86.1	2
S6ASS6101/328 ●	100.6	50.0	56.0	22.5	86.3	2
S6ASS6120/328	120.1	48.5	54.0	59.0	112.6	2
S6ASS5120/328 ●	128.7	40.0	48.0	20.0	110.8	2
S6ASS5150/328 ●	148.9	45.0	50.0	43.0	152.6	2
S6ASS5151/328	148.9	48.0	54.0	43.0	152.3	2
S6ASS5152/328 ●	153.4	68.0	75.0	34.0	129.2	2
S6ASS5170/328 ●	171.1	45.0	50.0	43.0	175.2	2
S6ASS5201/328 ●	200.1	68.0	75.0	23.0	186.2	2
S6ASS6200/328 ●	200.9	48.0	54.0	15.0	193.2	2
S6ASS2250/328 ●	249.8	50.0	54.0	20.0	247.5	2

515 nm - 545 nm

Artikelnummer part number	Brennweite focal length [mm]	freier-Ø clear-Ø [mm]	Außen-Ø housing-Ø [mm]	Länge length [mm]	Arbeitsabstand working distance [mm]	Anzahl Linsen number of lenses
S6ASS2020/292 ●	24.5	12.5	25.0	13.5	19.3	3
S6ASS2550/292	49.3	23.0	30.0	20.0	45.7	2
S6ASS2560/292 ●	58.4	23.0	30.0	24.5	51.8	2
S6ASS2060/292 ●	62.4	34.0	40.0	32.0	47.9	3
S6ASS300/292 ●	99.7	20.0	41.0	16.0	86.7	3
S6ASS6150/292	146.3	50.0	56.0	20.0	135.0	2
S6ASS5370/292 ●	174.5	35.0	41.0	24.0	174.1	2
S6ASS6200/292 ●	196.1	48.0	54.0	15.0	188.5	2

355 nm

Artikelnummer part number	Brennweite focal length [mm]	freier-Ø clear-Ø [mm]	Außen-Ø housing-Ø [mm]	Länge length [mm]	Arbeitsabstand working distance [mm]	Anzahl Linsen number of lenses
S6ASS2020/075 ●	25.4	12.5	25.0	17.0	17.9	3
S6ASS2550/075	48.2	23.0	30.0	20.0	43.5	2
S6ASS2060/075 ●	60.0	34.0	40.0	30.0	46.5	3
S6ASS5185/075 ●	86.4	35.0	40.0	15.0	77.8	2
S6ASS5120/075 ●	114.4	40.0	48.0	20.0	104.4	2

266 nm

Artikelnummer part number	Brennweite focal length [mm]	freier-Ø clear-Ø [mm]	Außen-Ø housing-Ø [mm]	Länge length [mm]	Arbeitsabstand working distance [mm]	Anzahl Linsen number of lenses
S6ASS2020/199 ●	23.8	12.5	25.0	17.0	17.1	3
S6ASS2550/199	44.3	23.0	30.0	20.0	40.4	2
S6ASS2060/199 ●	57.3	34.0	40.0	30.0	43.9	3
S6ASS5185/199 ●	81.9	35.0	40.0	15.0	73.4	2
S6ASS5120/199 ●	109.0	40.0	48.0	20.0	99.1	2

■ **1064 nm**

Artikelnummer <i>part number</i>	Brennweite <i>focal length</i> [mm]	freier-Ø <i>clear-Ø</i> [mm]	Außen-Ø <i>housing-Ø</i> [mm]	Länge <i>length</i> [mm]	Arbeitsabstand <i>working distance</i> [mm]	Anzahl Linsen <i>number of lenses</i>
S6ASS1030/126	30.0	14.0	20.0	11.0	25.1	2
S6ASS1035/126	35.0	16.0	20.0	11.0	30.8	2
S6ASS0065/126	40.0	26.0	28.0	22.5	31.6	3
S6ASS0063/126	40.1	21.0	23.0	14.0	30.4	2
S6ASS0030/126	50.1	23.5	35.0	34.0	27.4	3
S6ASS0159/126	56.0	35.0	41.0	26.5	42.7	3
S6ASS0060/126	59.9	48.0	54.0	36.0	42.5	3
S6ASS0064/126	60.0	26.0	28.0	22.5	54.7	2
S6ASS0074/126	60.0	21.0	23.0	14.0	53.7	2
S6ASS0311/126	70.9	26.0	28.0	22.5	65.4	2
S6ASS0177/126	76.7	35.0	41.0	24.0	64.2	3
S6ASS6001/126	78.9	48.0	54.0	36.0	67.0	3
S6ASS0078/126	85.3	25.5	28.0	22.5	79.9	2
S6ASS0115/126	90.0	35.0	41.0	32.0	89.1	3
S6ASS0098/126	121.6	35.0	41.0	24.0	110.8	3
S6ASS0169/126	125.2	43.0	52.0	29.0	109.8	3
S6ASS0066/126	162.2	35.0	41.0	22.0	153.3	2

■ **532 nm**

Artikelnummer <i>part number</i>	Brennweite <i>focal length</i> [mm]	freier-Ø <i>clear-Ø</i> [mm]	Außen-Ø <i>housing-Ø</i> [mm]	Länge <i>length</i> [mm]	Arbeitsabstand <i>working distance</i> [mm]	Anzahl Linsen <i>number of lenses</i>
S6ASS1030/121	29.8	14.0	20.0	11.0	25.0	2
S6ASS6001/121	76.1	48.0	54.0	36.0	63.9	3
S6ASS0177/121	76.6	35.0	41.0	24.0	64.0	3
S6ASS5340/121	88.9	30.0	41.0	21.8	64.4	2
S6ASS0115/121	89.4	35.0	41.0	32.0	88.7	3
S6ASS5320/121 ●	114.5	31.0	41.0	15.5	105.8	2

■ 1064 nm

Artikelnummer <i>part number</i>	Brennweite <i>focal length</i> [mm]	Linsen-Ø <i>lens-Ø</i> [mm]	Mittendicke <i>center thickness</i> [mm]
S1LA00103/126	25.0	12.5	5.5
S1LA00063/126	50.0	25.0	9.1
S1LA00079/126	50.0	20.0	6.9
S1LA00167/126	50.0	31.5	14.3
S1LA00025/126	60.0	30.0	12.5
S1LA00071/126	60.0	25.4	9.5
S1LA00075/126	60.0	18.0	6.0
S1LA00705/126	75.0	25.0	7.0
S1LA00028/126	80.0	31.5	11.2
S1LA00054/126	80.0	18.0	5.2
S1LA00067/126	80.0	50.0	20.2
S1LA00080/126	80.0	25.0	8.2
S1LA00115/126	90.0	30.0	11.0
S1LA00026/126	100.0	30.0	17.5
S1LA00066/126	100.0	50.0	17.5
S1LA00072/126	100.0	25.4	7.2
S1LA00029/126	120.0	31.5	9.4
S1LA00065/126	120.0	50.0	15.5
S1LA00073/126	120.0	25.4	7.2
S1LA00061/126	160.0	50.0	13.5
S1LA00070/126	160.0	31.5	8.6
S1LA00069/126	190.0	50.0	13.6
S1LA00099/083	190.0	75.0	25.0
S1LA00098/126	200.0	50.0	12.6
S1LA00200/126	200.0	19.0	5.0
S1LA01098/126	200.0	63.0	17.2
S1LA00068/126	300.0	50.0	12.0
S1LA00101/126	310.0	80.0	18.5