

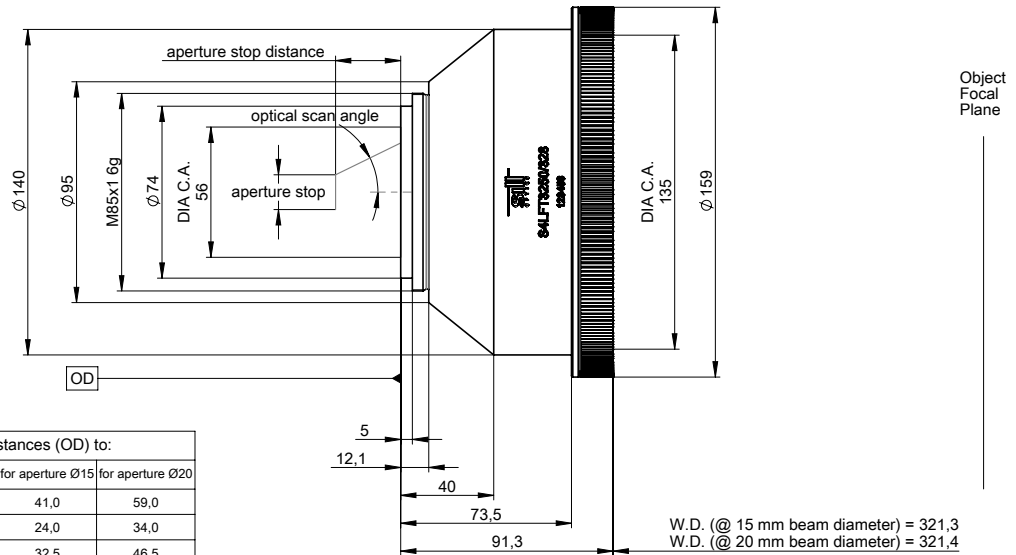
S4LFT3250/328

F-Theta
standard - fused silica
1030 - 1090 nm



illustration only

outline drawing



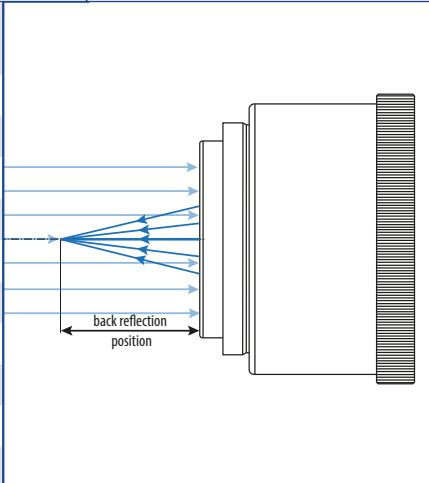
	optical distances (OD) to:	
	for aperture Ø15	for aperture Ø20
mirror 1	41,0	59,0
mirror 2	24,0	34,0
aperture stop distance	32,5	46,5
optical scan angle	26,0°	18,5°
back reflection 1	12,5	12,5
back reflection 2	48,0	48,0
back reflection 3	48,9	48,9
back reflection 4	135,2	135,2
scan area	160x160	115x115

specifications

article number	S4LFT3250/328	
design wavelength [nm]	1064	
effective focal length [mm]	255.0	
max. entrance beam- \emptyset [mm]	15.0	20.0
optical scan angle [\pm°]	26.0	18.5
scan length [mm] (1 mirror system)	226.3	162.7
aperture stop distance [mm]	32.5	46.5
working distance [mm]	321.3	321.4
scan area for a 2 mirror system with mirror distance from lens housing for mirror 2 / mirror 1	160 x 160	115 x 115
	24.0 / 41.0	34.0 / 59.0
max. telecentricity error [$^\circ$]	10.7	7.0
total transmission [%]	> 97	
lens material	fused silica	
LIDT (coating)	5.0 J/cm ² per 1ns pulse at 50Hz	
SP and USP usable	yes	
weight [kg]	1.3	
cover glass	S4LPG2175/328	
absorption [ppm]	111	
cleanliness	not specified	

back reflection position

back reflection [mm] for 1064	
12.47	
48.02	
48.87	
135.23	
0.00	
0.00	
0.00	
0.00	
0.00	
0.00	
0.00	



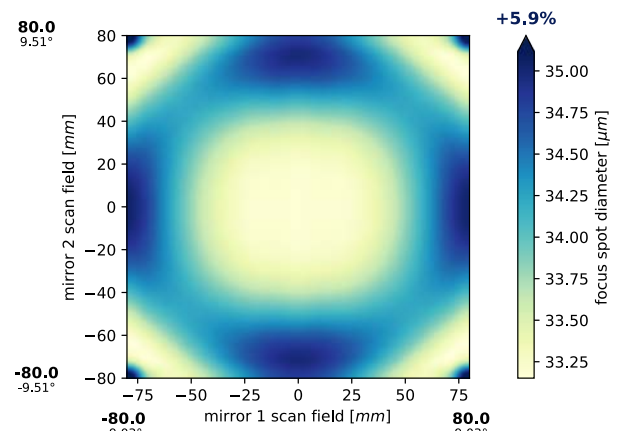
notes

The values given assume a vignetting of less than 1 %

Effective focal length and working distance have tolerance of +/- 1.5 %

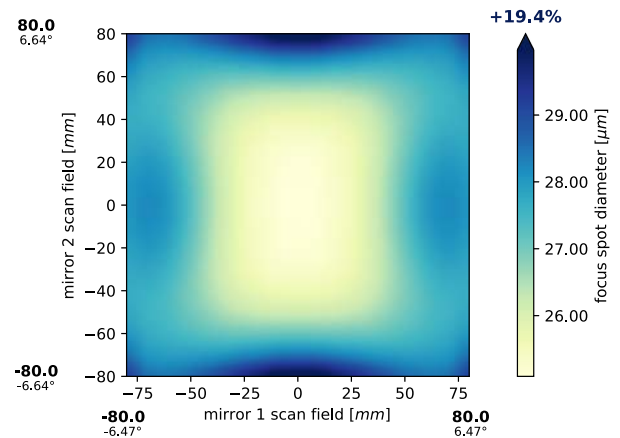
Absorption tolerance +/- 25 %. Absorption may degrade over time, correct cleaning is able to reset to factory condition.

spot for 15.0 mm beam diameter



spot diameter at 86.5 % level for a Gaussian beam ($M^2 = 1$) with 15.0 mm diameter at $1/e^2$, clipped at 15.0 mm field size and mirror distances as given above for a two mirror scan system

spot for 20.0 mm beam diameter



spot diameter at 86.5 % level for a Gaussian beam ($M^2 = 1$) with 20.0 mm diameter at $1/e^2$, clipped at 20.0 mm field size and mirror distances as given above for a two mirror scan system