

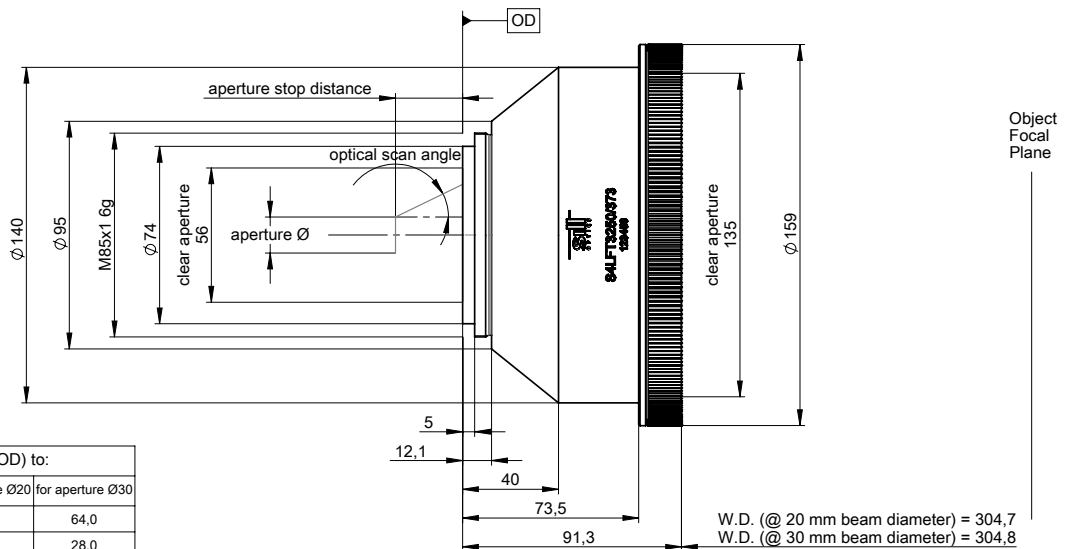
S4LFT3250/373

F-Theta
standard - fused silica
420 - 480 nm



illustration only

outline drawing

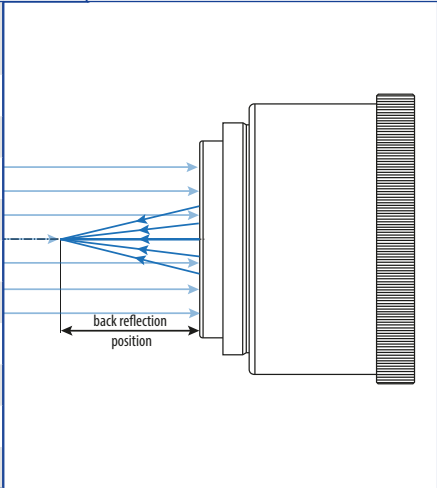


optical distances (OD) to:		
	for aperture Ø20	for aperture Ø30
mirror 1	54,0	64,0
mirror 2	28,0	28,0
aperture stop distance	41,0	46,0
optical scan angle	19,6°	13,5°
back reflection 1	10,5	10,5
back reflection 2	42,7	42,7
back reflection 3	43,5	43,5
back reflection 4	135,2	135,2
scan area	115x115	80x80

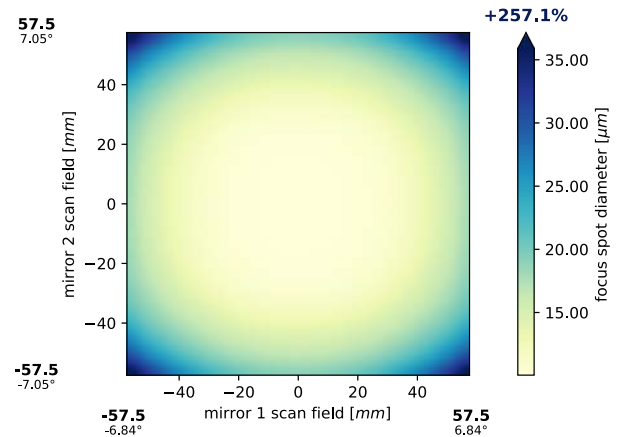
specifications

article number	S4LFT3250/373	
design wavelength [nm]	450	
effective focal length [mm]	240.9	
max. entrance beam-Ø [mm]	20.0	30.0
optical scan angle [±°]	19.6	13.5
scan length [mm] (1 mirror system)	162.6	113.1
aperture stop distance [mm]	41.0	46.0
working distance [mm]	304.8	304.8
scan area for a 2 mirror system with mirror distance from lens housing for mirror 2 / mirror 1	115 x 115	80 x 80
	28.0 / 54.0	28.0 / 64.0
max. telecentricity error [°]	7.4	5.1
total transmission [%]	> 98	
lens material	fused silica	
LIDT (coating)	not specified	
SP and USP usable	yes	
weight [kg]	2.08	
cover glass	S4LPG2175/373	
absorption [ppm]	not specified	
cleanliness	not specified	

back reflection position

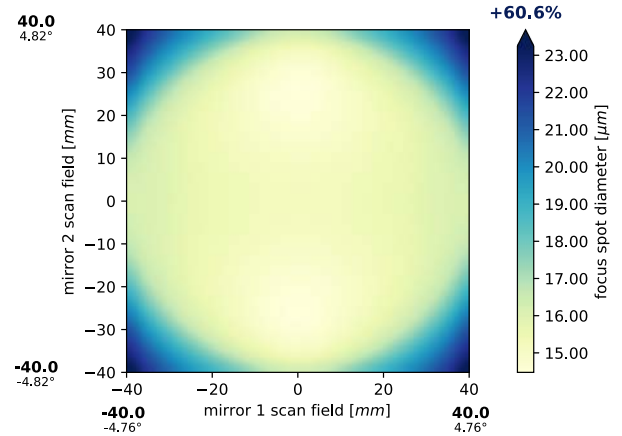
back reflection [mm] for 450	
9.93	
42.38	
43.20	
135.16	
0.00	
0.00	
0.00	
0.00	
0.00	
0.00	

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

spot for 30.0 mm beam diameter



spot diameter at 86.5 % level for a Gaussian beam ($M^2 = 1$) with 30.0 mm diameter at $1/e^2$, clipped at 30.0 mm field size and mirror distances as given above for a two mirror scan system

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.