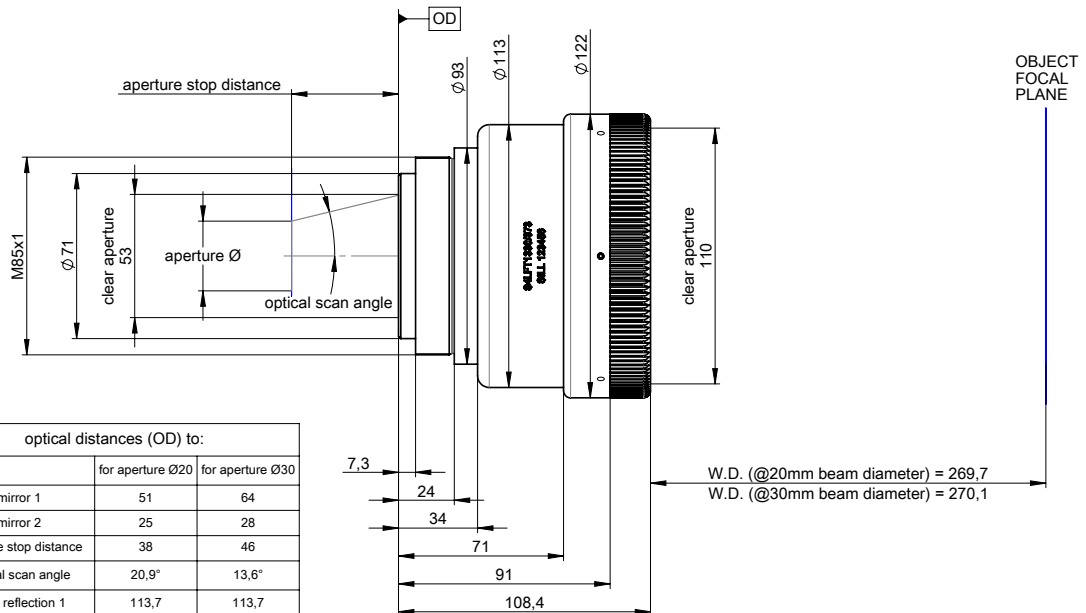


S4LFT1330/373

F-Theta
standard - fused silica
420 - 480 nm



outline drawing

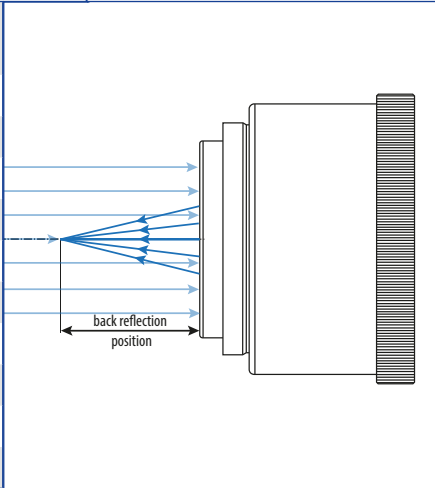


optical distances (OD) to:		
	for aperture $\varnothing 20$	for aperture $\varnothing 30$
mirror 1	51	64
mirror 2	25	28
aperture stop distance	38	46
optical scan angle	20,9°	13,6°
back reflection 1	113,7	113,7
back reflection 2	115,2	115,2
back reflection 3	177,2	177,2
back reflection 4	38,6	38,6
back reflection 5	3,7	3,7
scan area	180x180	115x115

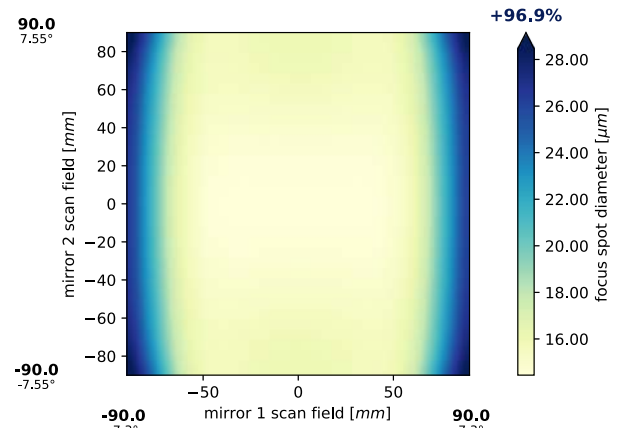
specifications

article number	S4LFT1330/373	
design wavelength [nm]	450	
effective focal length [mm]	338.9	
max. entrance beam- \emptyset [mm]	20.0	30.0
optical scan angle [\pm°]	20.9	13.6
scan length [mm] (1 mirror system)	254.6	162.6
aperture stop distance [mm]	37.5	46.0
working distance [mm]	268.2	268.2
scan area for a 2 mirror system with mirror distance from lens housing for mirror 2 / mirror 1	180 x 180	115 x 115
	25.0 / 51.0	28.0 / 64.0
max. telecentricity error [$^\circ$]	17.7	11.2
total transmission [%]	> 98	
lens material	fused silica	
LIDT (coating)	not specified	
SP and USP usable	yes	
weight [kg]	1.5	
cover glass	S4LPG2175/373	
absorption [ppm]	not specified	
cleanliness	not specified	

back reflection position

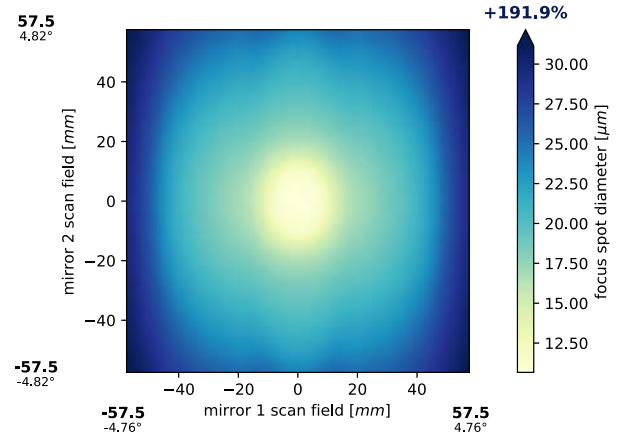
back reflection [mm] for 450	
3.70	
38.60	
113.70	
115.20	
177.20	
0.00	
0.00	
0.00	
0.00	
0.00	

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.