DATA SHEET

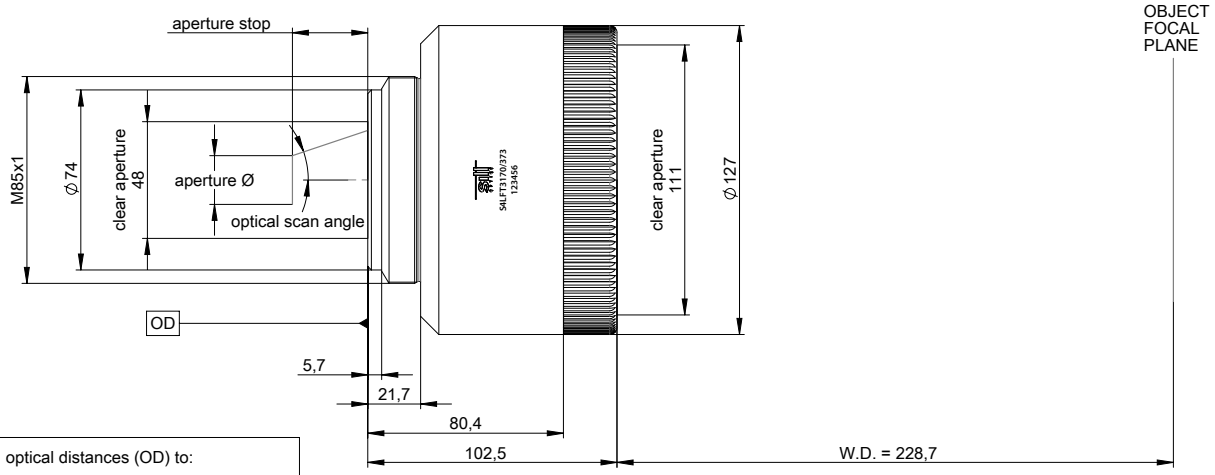
新特光电 Sintec Optronics

S4LFT3170/373

F-Theta
telecentric - fused silica
420 - 480 nm

illustration only

outline drawing



optical distances (OD) to:		
	for aperture Ø20	for aperture Ø30
mirror 1	44	64
mirror 2	18	28
aperture stop distance	31	46
optical scan angle	18,5°	10,9°
back reflection 1	5,8	5,8
back reflection 2	6,3	6,3
back reflection 3	230,9	230,9
scan area	75x75	45x45

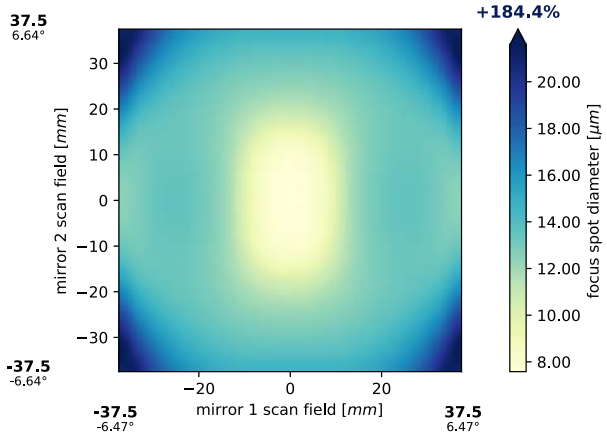
DATA SHEET

新特光电 Sintec Optronics

specifications

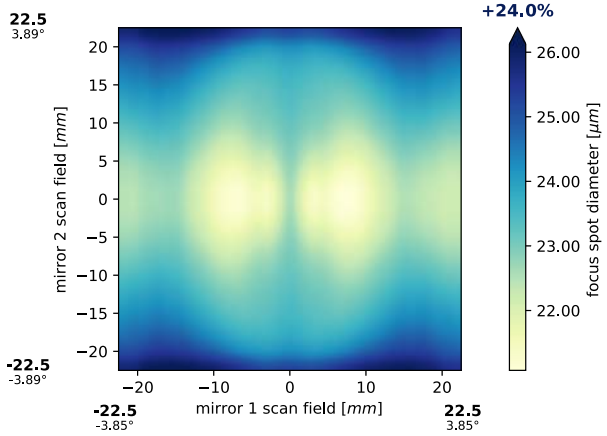
article number	S4LFT3170/373	
design wavelength [nm]	450	
effective focal length [mm]	168.0	
max. entrance beam-Ø [mm]	20.0	30.0
aperture stop distance [mm]	31.0	46.0
working distance [mm]	228.3	228.3
scan area for a 2 mirror system with mirror distance from lens housing for mirror 2 / mirror 1	75 x 75 18.0 / 44.0	45 x 45 28.0 / 64.0
max. telecentricity error [°]	3.1	1.7
total transmission [%]	> 98	
lens material	fused silica	
LIDT (coating)	not specified	
SP and USP usable	yes	
weight [kg]	1.86	
cover glass	S4LPG4160/373	
absorption [ppm]	not specified	
cleanliness	not specified	

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

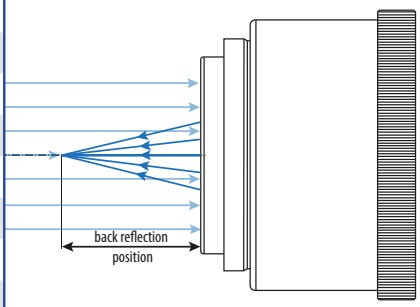
spot for 30.0 mm beam diameter



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

back reflection position

back reflections [mm] for 450
5.54
6.06
230.87
0.00
0.00
0.00
0.00
0.00
0.00
0.00



remarks

The stated values are based on a vignetting of less than 1 %.

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

Absorption tolerance +/- 25 %. Absorption may increase. Correct cleaning establishes original condition.