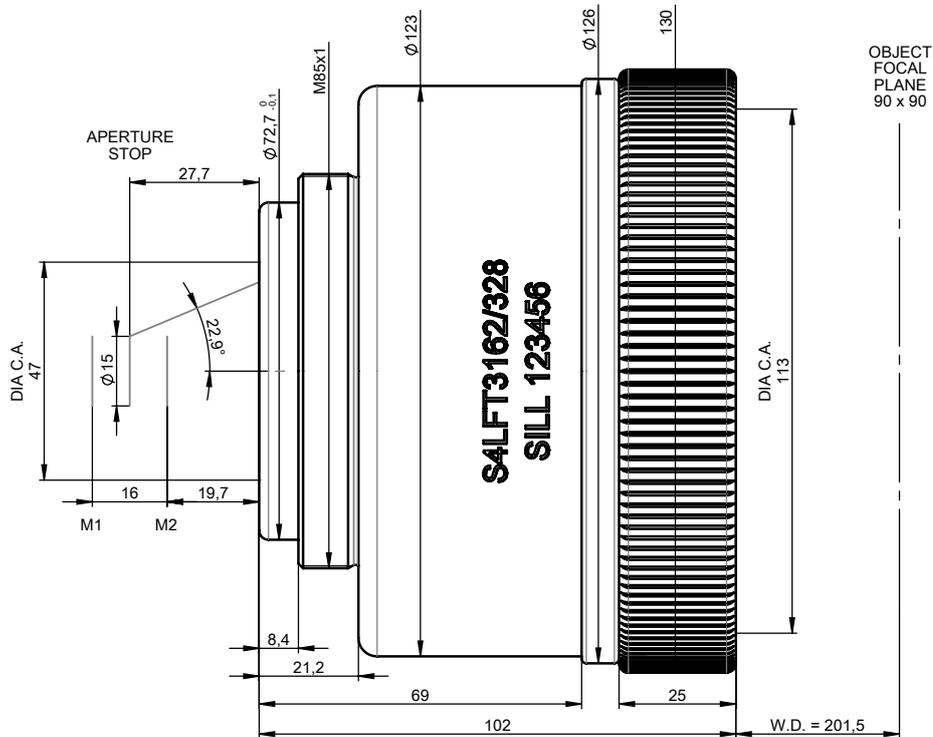


## S4LFT3162/328

F-Theta  
telecentric - fused silica  
1030 - 1090 nm



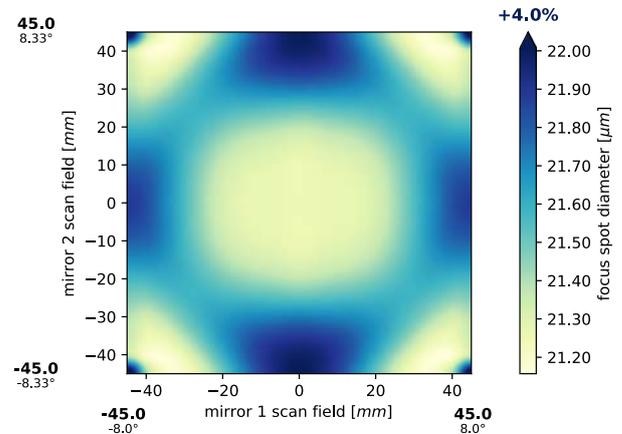
### outline drawing



## specifications

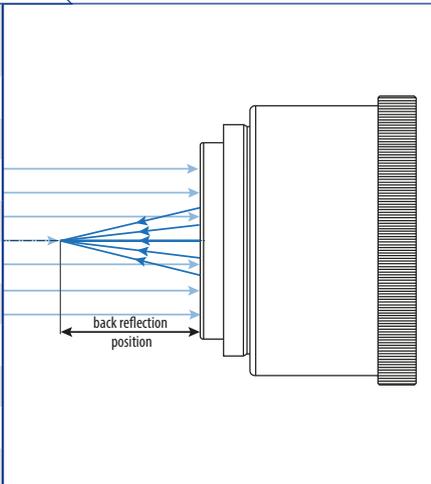
article number	S4LFT3162/328
design wavelength [nm]	1064
effective focal length [mm]	163.5
max. entrance beam- $\emptyset$ [mm]	15.0
optical scan angle [ $\pm^\circ$ ]	22.9
scan length [mm] (1 mirror system)	127.3
aperture stop distance [mm]	27.7
working distance [mm]	201.5
scan area for a 2 mirror system with mirror distance from lens housing for mirror 2 / mirror 1	90 x 90 19.7 / 35.7
max. telecentricity error [ $^\circ$ ]	5.6
total transmission [%]	> 97
lens material	fused silica
LIDT (coating)	5.0 J/cm <sup>2</sup> per 1ns pulse at 50Hz
SP and USP usable	yes
weight [kg]	1.8
cover glass	S4LPG4160/328
absorption [ppm]	105
cleanliness	not specified

## spot



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

## back reflection position

back reflection [mm] for 1064	
9.52	
10.16	
126.52	
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.