

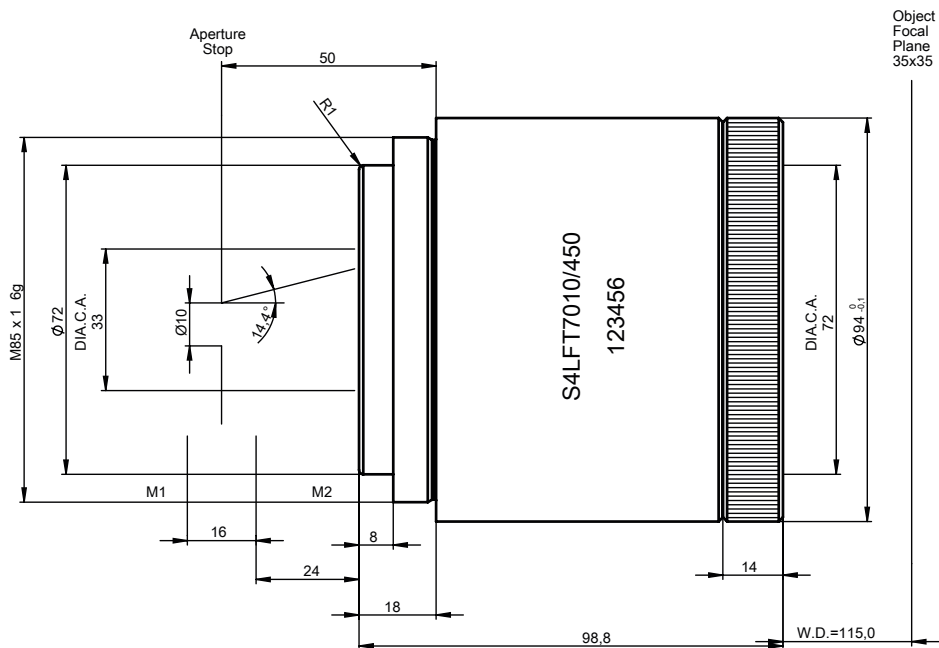
## S4LFT7010/450

F-Theta  
color corrected  
1000 - 1100 nm



illustration only

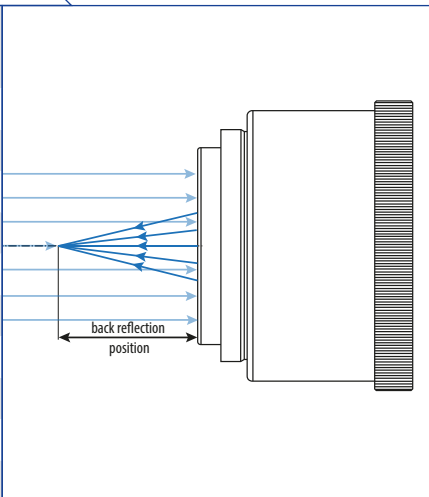
### outline drawing



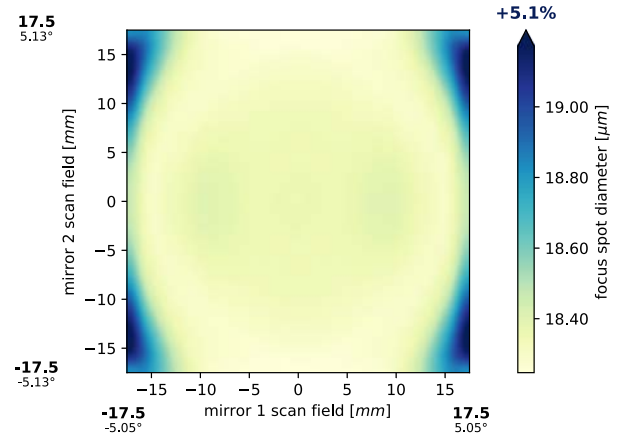
## specifications

article number	S4LFT7010/450	
design wavelength [nm]	1000	1100
effective focal length [mm]	100.2	100.2
max. entrance beam-Ø [mm]	10.0	
aperture stop distance [mm]	32.0	
working distance [mm]	115.0	115.0
scan area for a 2 mirror system with mirror distance from lens housing for mirror 2 / mirror 1	35 x 35 24.0 / 40.0	
max. telecentricity error [°]	1.4	1.4
lateral color shift [µm]	< 0.01	
chromatic focal shift [mm]	0.04	
total transmission [%]	> 96	> 96
lens material	optical glass	
LIDT (coating)	1.0 J/cm <sup>2</sup> per 1ns pulse at 50Hz	
SP and USP usable	yes	
weight [kg]	1.1	
cover glass	S4LPG0005/450	
absorption [ppm]	not specified	
cleanliness	not specified	

## back reflection position

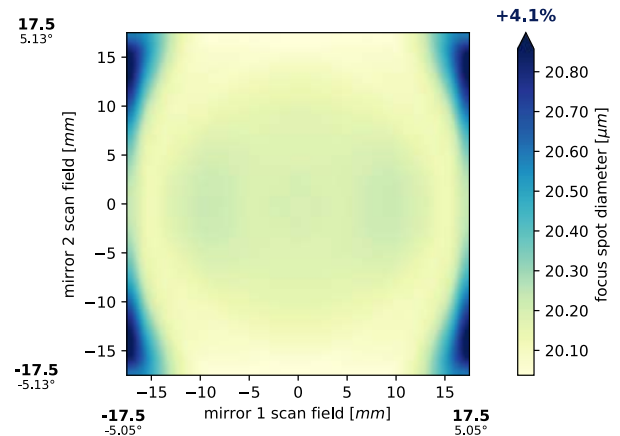
back reflections [mm]		Diagram
for 1000 nm	for 1100 nm	
0.24	0.24	
11.78	11.78	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	

## spot for 1000 nm



spot diameter at 86.5 % level for a Gaussian beam ( $M^2 = 1$ ) with 10.0 mm diameter at  $1/e^2$ , clipped at 10.0 mm field size and mirror distances as given above for a two mirror scan system

## spot for 1100 nm



spot diameter at 86.5 % level for a Gaussian beam ( $M^2 = 1$ ) with 10.0 mm diameter at  $1/e^2$ , clipped at 10.0 mm field size and mirror distances as given above for a two mirror scan system

## 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.