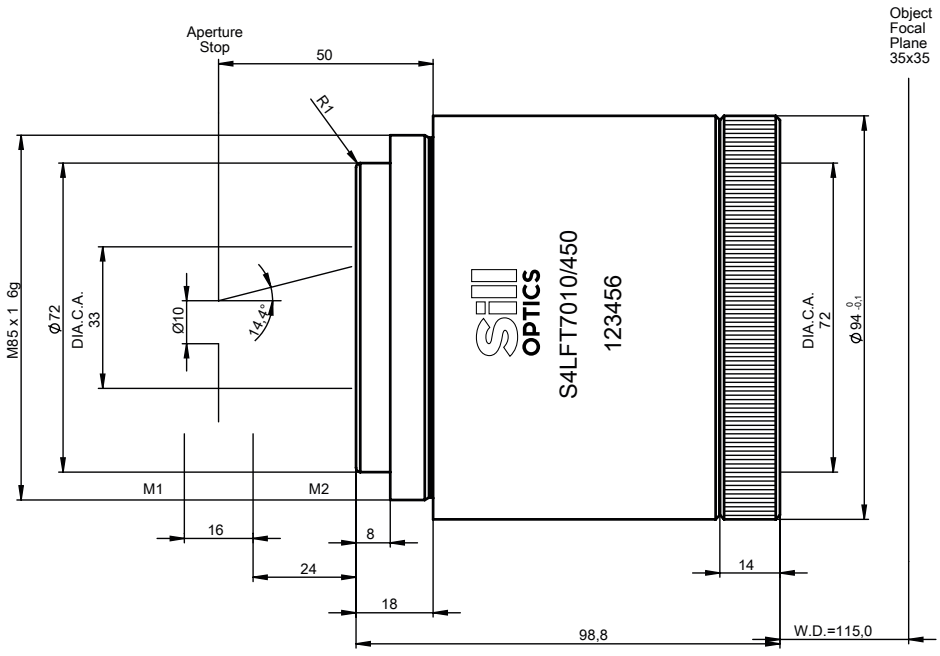
DATA SHEET

S4LFT7010/450

F-Theta
color corrected
1000 - 1100 nm

illustration only

outline drawing



Sill Optics GmbH & Co. KG • Johann-Höllfritsch-Straße 13 • D-90530 Wendelstein • Tel.: +49 9129 9023-0 • info@silloptics.de • www.silloptics.de

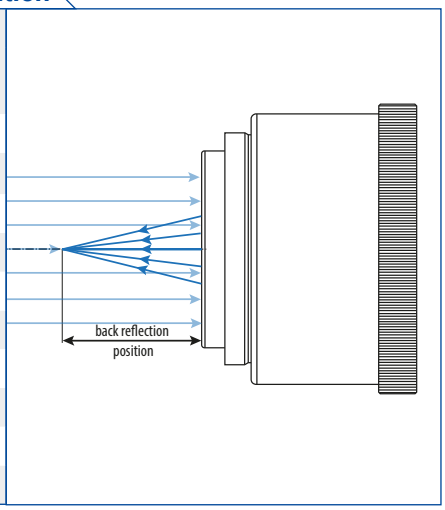
DATA SHEET

specifications

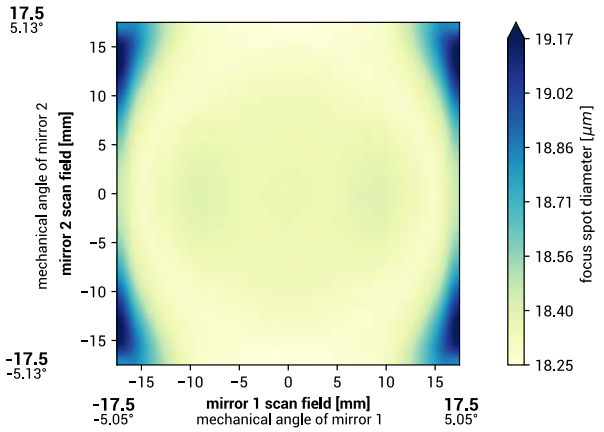
article number	S4LFT7010/450	
design wavelength [nm]	1000	1100
effective focal length [mm]	100.2	100.2
max. entrance beam-Ø [mm]	10.0	
aperture stop distance [mm]	32.0	
working distance [mm]	115.0	115.0
scan area for a 2 mirror system with mirror distance from lens housing for mirror 2 / mirror 1	35 x 35 24.0 / 40.0	
max. telecentricity error [°]	1.5	1.5
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/cm² 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]	
for 1000 nm	for 1100 nm
0.24	0.24
11.78	11.78
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0

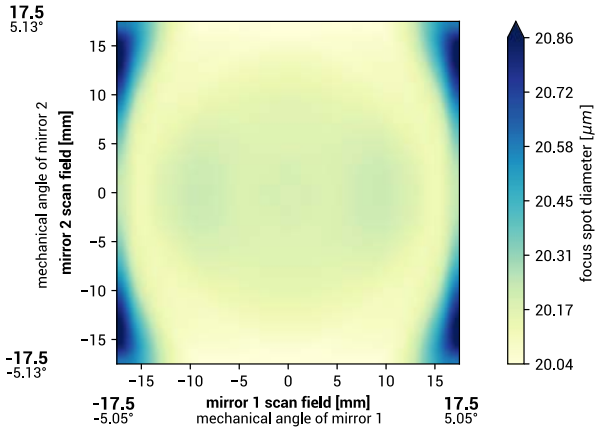


spot for 1000 nm



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.

Sill Optics GmbH & Co. KG • Johann-Höllfritsch-Straße 13 • D-90530 Wendelstein • Tel.: +49 9129 9023-0 • info@silloptics.de • www.silloptics.de