

# DATA SHEET

## S4LFT1420/328

F-Theta  
standard - fused silica  
1030 - 1090 nm

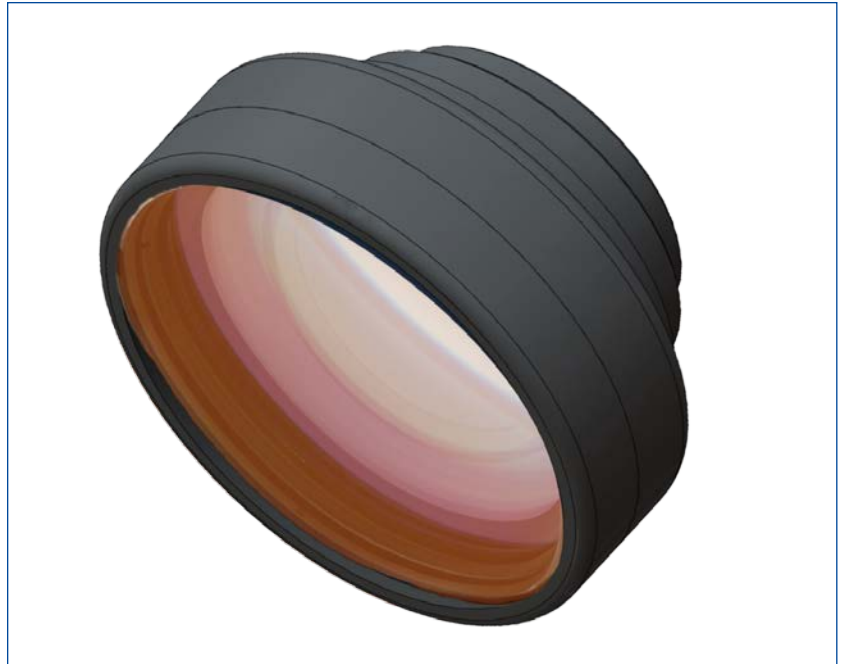
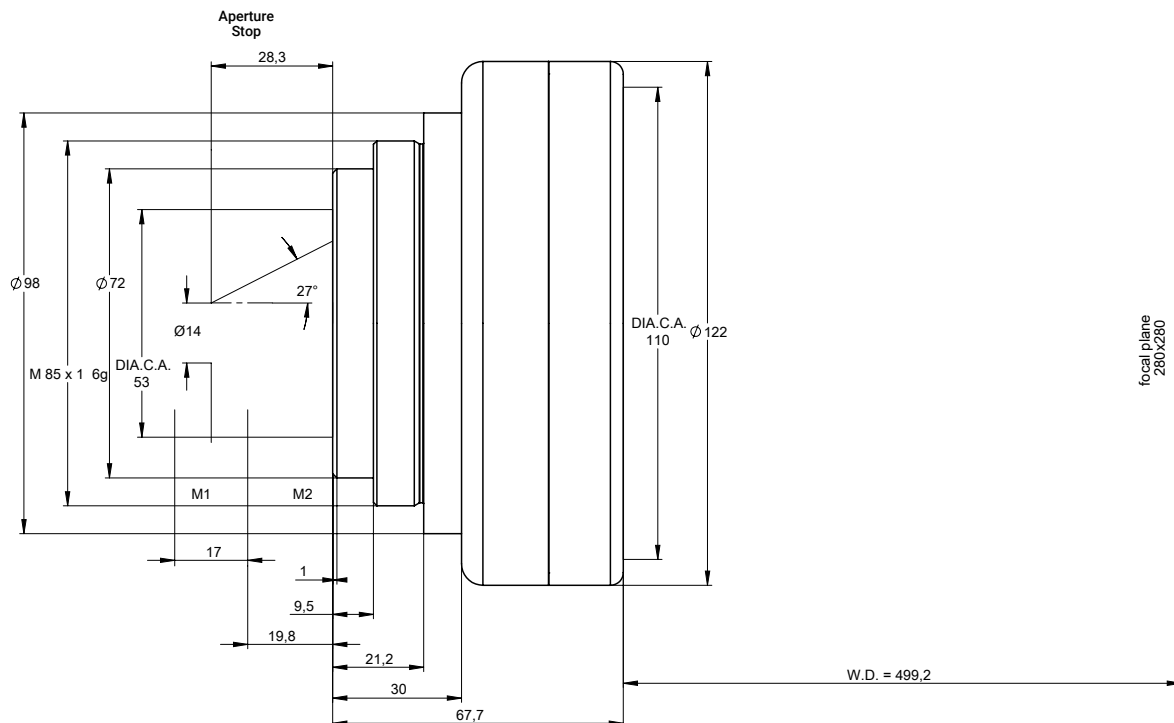


illustration only

### outline drawing

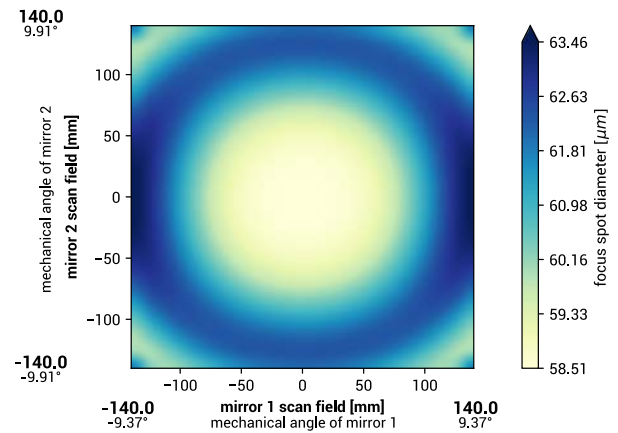


# DATA SHEET

## specifications

article number	S4LFT1420/328
design wavelength [nm]	1064
effective focal length [mm]	420.0
working distance [mm]	499.2
max. entrance beam-Ø [mm]	14.0
aperture stop distance [mm]	28.3
scan area for a 2 mirror system with mirror distance from lens housing for mirror 2 / mirror 1 [mm x mm]	280 x 280 19.8 / 36.8
max. telecentricity error [°]	17.3
total transmission [%]	> 97
absorption [ppm]	92
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]	1.0
cover glass	S4LPG4160/328
cleanliness	not specified

## spot



spot diameter at 86.5 % level for a Gaussian beam ( $M^2 = 1$ ) with 14.0 mm diameter at  $1/e^2$ , clipped at 14.0 mm field size and mirror distances as given above for a two mirror scan system

## back reflection positions

back reflections [mm] for 1064	
8.17	
12.60	
30.63	
78.80	
122.30	
134.93	
135.65	
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 a tolerance of +/- 1.5 %.

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