# DATA SHEET 

## S4LFT4149／075

F－Theta<br>telecentric－fused silica 355 nm


illustration only
outline drawing


| specifications |  |
| :--- | :---: |
| article number | S4LFT4149/075 |
| design wavelength [nm] | 355 |
| effective focal length [mm] | 48.1 |
| working distance [mm] | 69.3 |
| max. entrance beam- $[\mathrm{mm}]$ | 15.0 |
| aperture stop distance [mm] | 23.8 |
| scan area for a 2 mirror system with <br> mirror distance from lens housing for <br> mirror 2 / mirror 1 [mm x mm] | $6 \times 6$ |
| max. telecentricity error [ ${ }^{\circ}$ ] | $15.3 / 32.3$ |
| total transmission [\%] | 2.1 |
| absorption [ppm] | $>97$ |
| lens material | not specified |
| LIDT (coating) | fused silica |
| SP and USP usable | 1.0 J/cm² per 1ns pulse |
| at 50Hz |  |
| weight [kg] | yes |
| cover glass | not yet weighed |
| cleanliness | S4LPG3105/075 |

spot

spot diameter at $86.5 \%$ level for a Gaussian beam ( $\mathrm{M}^{2}=1$ ) with 15.0 mm diameter at $1 / \mathrm{e}^{2}$, clipped at 15.0 mm field size and mirror distances as given above for a two mirror scan system
back reflection positions

| back reflections [mm] for 355 |  |  |
| :---: | :---: | :---: |
| 6.79 |  |  |
| 7.43 |  | + |
| 0.00 |  |  |
| 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 a tolerance of $+/-1.5 \%$.
Absorption tolerance $+/-25 \%$. Absorption may increase. Correct cleaning establishes original condition.

