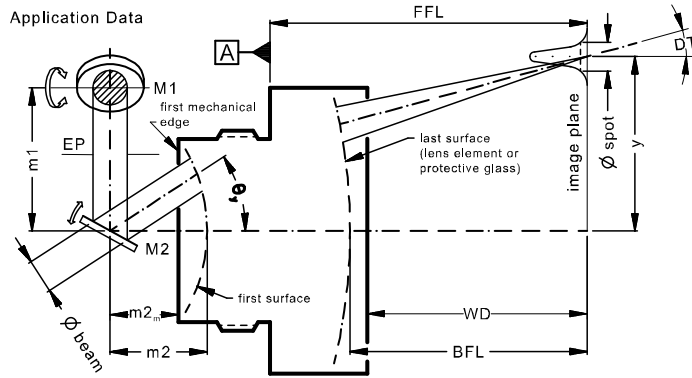


LINOS F-Theta-Ronar Lens

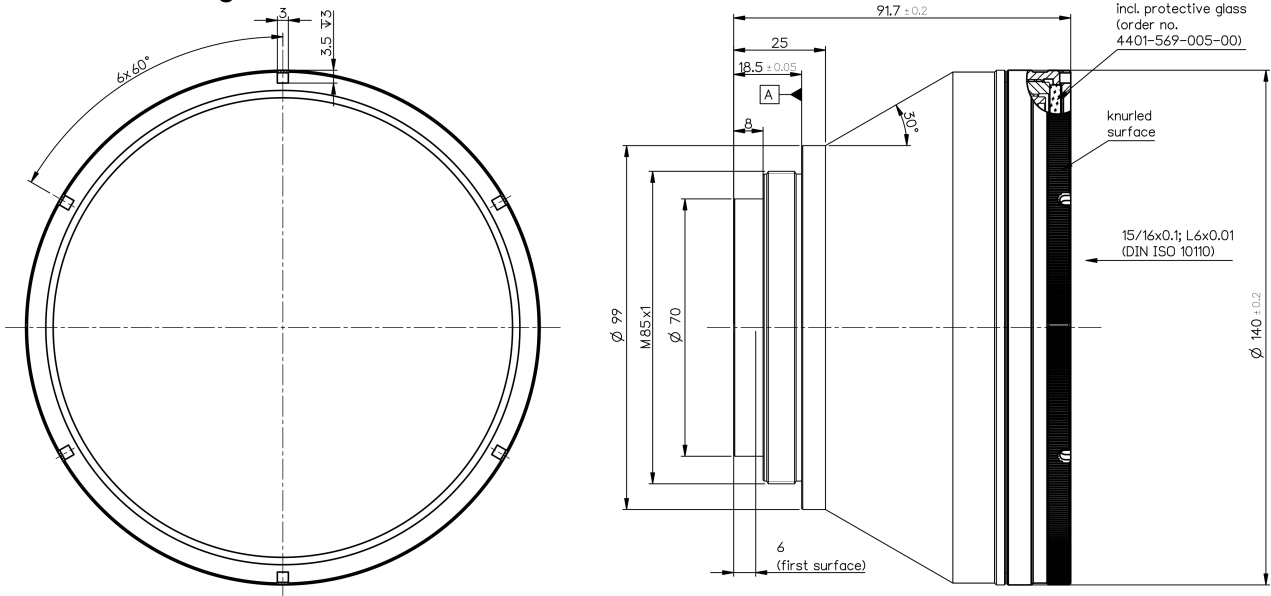
f = 354mm, 1900-2000nm, fused silica



| Part number | 4401-569-000-21 | | | |
|------------------------------------------------------|-----------------------------|--------------------|-----------------|-----------|
| Design wavelength | λ | (nm) | 1940 | |
| Effective focal length | EFL | (mm) | 353.8 | |
| Back focal length | BFL | (mm) | 460.3 | |
| Working distance | WD | (mm) | 457.5 | |
| Flange focal length | FFL | (mm) | 530.7 | |
| Beam diameter 1/e ² truncated | $\varnothing_{\text{beam}}$ | (mm) | 14.0 | 20.0 |
| Recommended mirror distance m1 | m1 | (mm) | 17.0 | 25.6 |
| Recommended mirror distance m2 | m2 | (mm) | 28.5 | 28.0 |
| Recommended mirror distance m2 _{mechanical} | m2 _m | (mm) | 22.5 | 22.0 |
| Scan angle | $\pm\theta_{x,y}$ | (°) | 16.6 | 14.7 |
| Scan area (edge length of scan field) | 2x * 2y | (mm ²) | 214 x 214 | 179 x 179 |
| Spot diameter | $\varnothing_{\text{spot}}$ | (μm) | 90 | 63 |
| Telecentric error (maximum deviation) | DT | (°) | 12.5 | 10.5 |
| Total transmission @ 1940nm | T | (%) | > 95 | |
| Focused back reflex positions from first surface | | (mm) | 17.9; 39.0 | |
| Weight | | (g) | 1875 | |
| Protective glass | PG | | 4401-569-005-00 | |

Optical parameters calculated for a 1-mirror system
 Subject to technical change

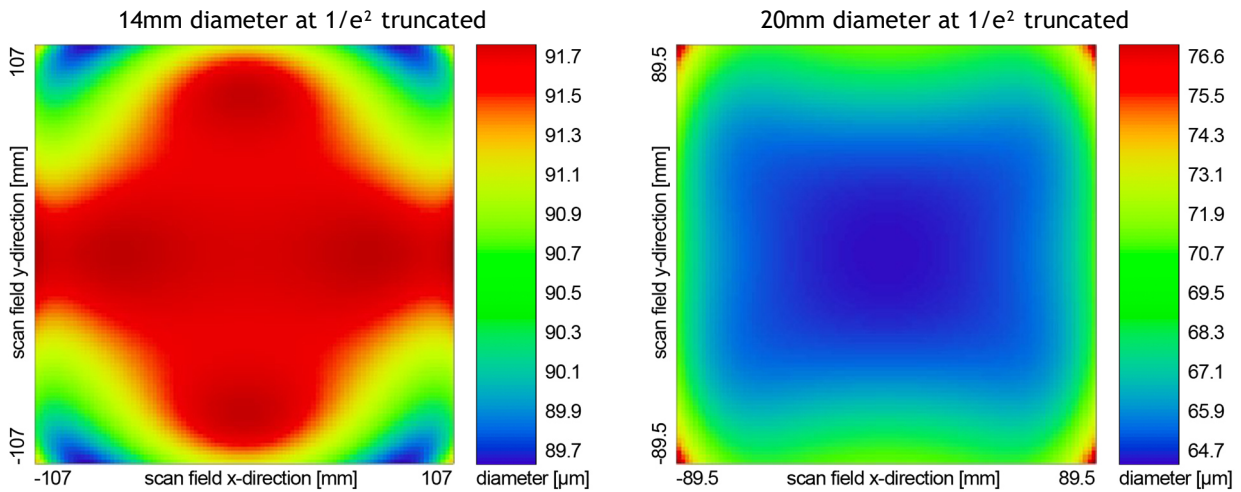
Mechanical drawing



Dimensions without tolerances are nominal values and illustration not to scale

Spot variation over scan field

Spot radius in μm at $1/e^2$ level for a Gaussian laser beam ($M^2=1$), focused over scan field
Field size and mirror distances as given above for a 2 mirror scan system, vignetting $\leq 1\%$



Notes:



For technical explanations, see our homepage.

In a 1-mirror system, the entrance pupil (EP) is the position of the scan mirror. In a 2-mirror system, it is the point where the scan mirrors should be placed around symmetrically to reach specified performance.