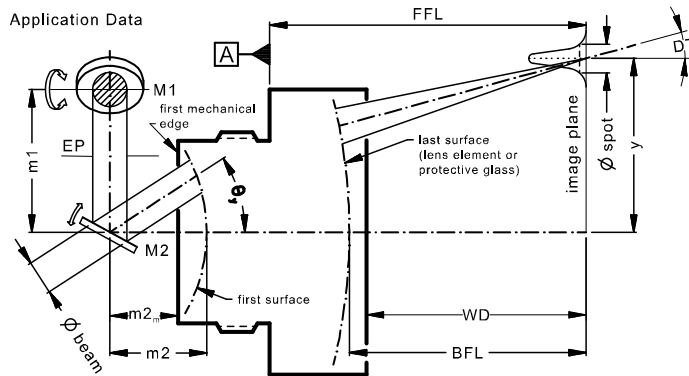


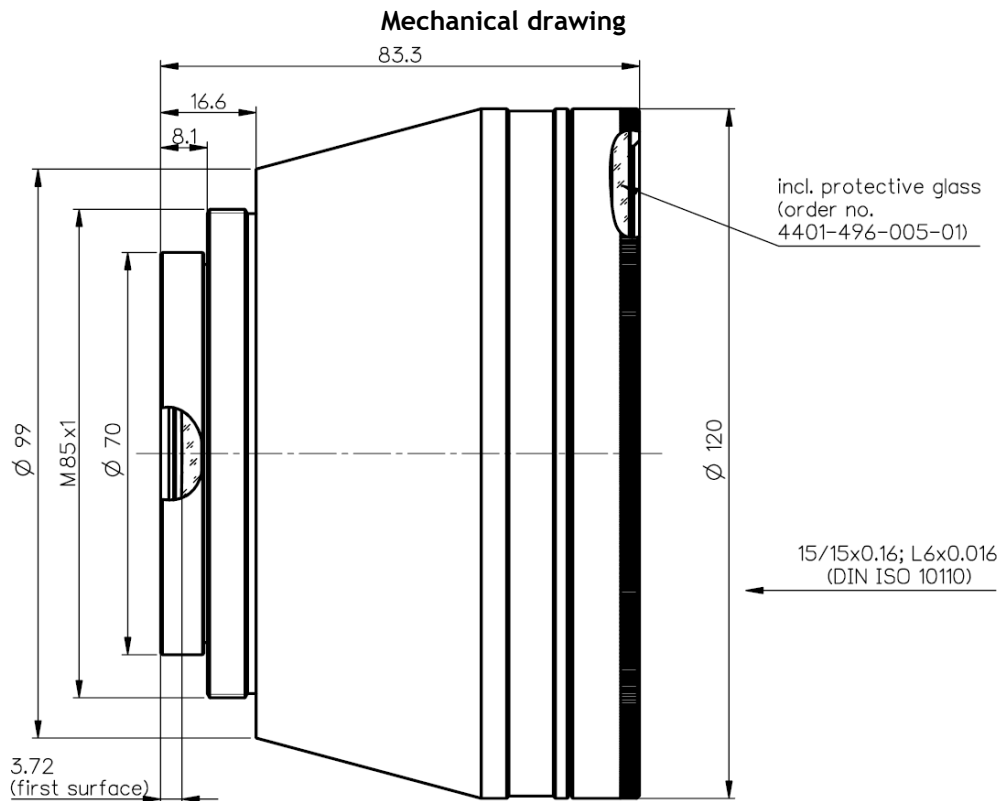
LINOS F-Theta-Ronar Lens

$f = 420\text{mm}$, 515-540nm, fused silica, low absorption



| | | | | | |
|------------------------------------------------------|-----------------------------|----------------------|--------------------------------------|-----------|-----------|
| Part number | 4401-590-000-26 | | | | |
| Design wavelength | λ | (nm) | 532 | | |
| Effective focal length | EFL | (mm) | 420.5 | | |
| Back focal length | BFL | (mm) | 500.4 | | |
| Working distance | WD | (mm) | 498.6 | | |
| Flange focal length | FFL | (mm) | 565.3 | | |
| Beam diameter 1/e ² truncated | $\varnothing_{\text{beam}}$ | (mm) | 14.0 | 15.0 | 20.0 |
| Recommended mirror distance m1 | m1 | (mm) | 17.0 | 18.4 | 25.6 |
| Recommended mirror distance m2 | m2 | (mm) | 23.5 | 20.5 | 25.0 |
| Recommended mirror distance m2 _{mechanical} | m2 _m | (mm) | 19.8 | 16.8 | 21.3 |
| Scan angle | $\pm\theta_{x,y}$ | (°) | 17.1 | 16.8 | 14.1 |
| Scan area (edge length of scan field) | 2x * 2y | (mm ²) | 251 x 251 | 246 x 246 | 208 x 208 |
| Scan diameter | $\varnothing_{\text{spot}}$ | (μm) | 29 | 27 | 21 |
| Telecentric error (maximum deviation) | DT | (°) | 15.0 | 14.9 | 12.3 |
| Total transmission @ 515 - 540nm | T | (%) | > 96 | | |
| Group delay dispersion at λ | GDD | (fs ²) | 3229 | | |
| LIDT coating @ 532nm, 8ns, 100Hz | | (J/cm ²) | 20 | | |
| LIDT coating @ 515nm, 204fs, 50kHz | | (J/cm ²) | 0.6 | | |
| Focused back reflex positions from first surface | | (mm) | 2.2; 5.0; 127.3; 128.0; 131.6; 148.7 | | |
| Weight | | (g) | 1270 | | |
| Protective glass | PG | | 4401-496-005-01 | | |

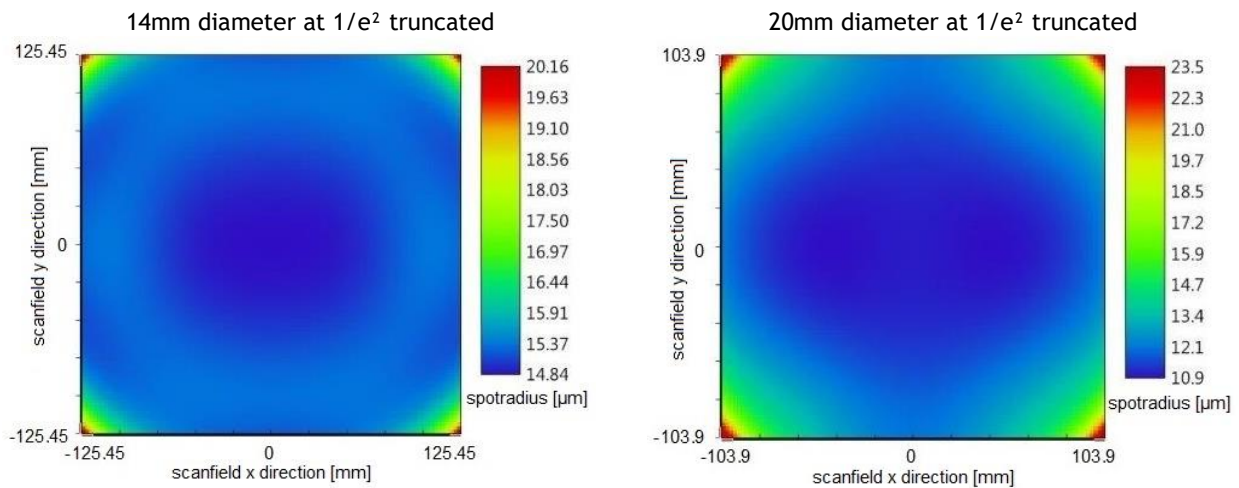
Optical parameters calculated for a 1-mirror system
 Subject to technical change



Dimensions without tolerances are nominal values and drawing not to scale

Spot variation over scanfield

Spot radius in μm at $1/e^2$ level for a Gaussian laser beam ($M^2=1$)
field size and mirror distances as given above for a 2 mirror scan system



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.