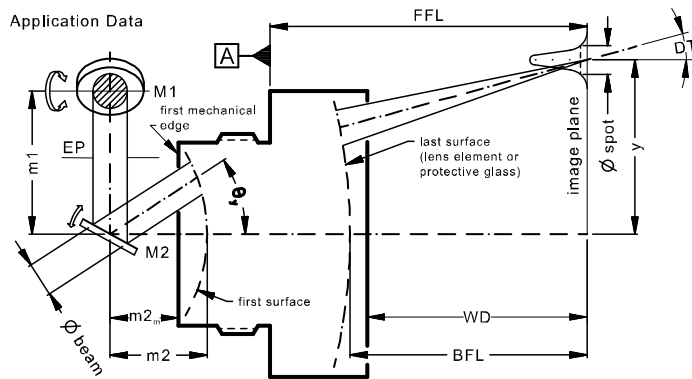


LINOS F-Theta-Ronar Lens

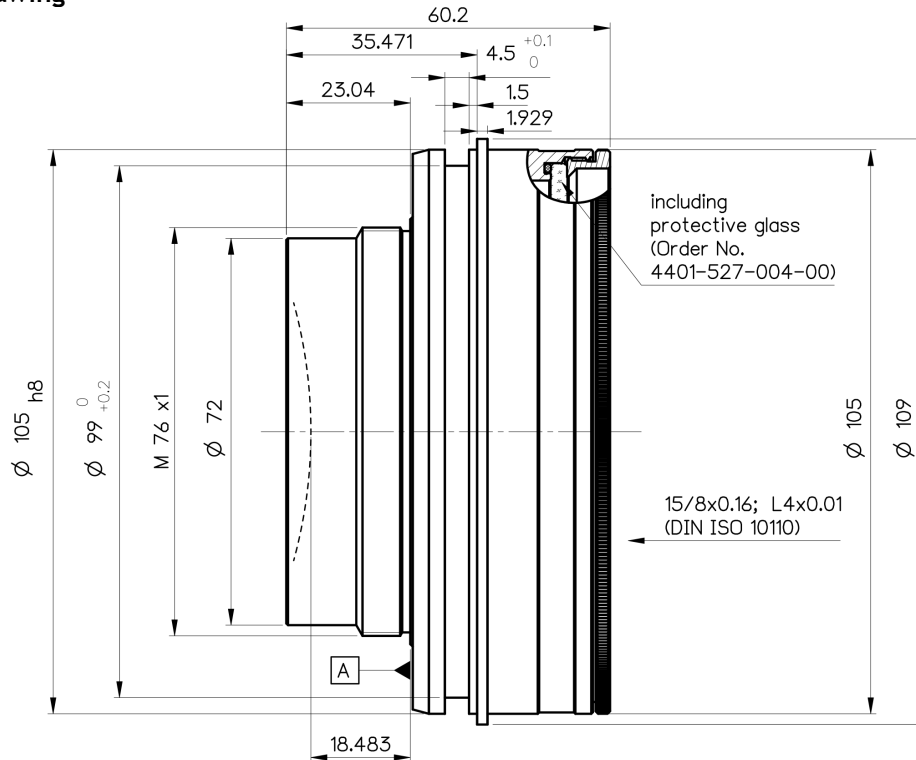
f = 163mm, 940-980nm



| Part number | 4401-527-000-21 | | |
|--|----------------------|--------------------|-----------------------------|
| Design wavelength | λ | (nm) | 980 |
| Effective focal length | EFL | (mm) | 162.1 |
| Back focal length | BFL | (mm) | 188.5 |
| Working distance | WD | (mm) | 180.5 |
| Flange focal length | FFL | (mm) | 217.7 |
| Beam diameter 1/e ² truncated | \varnothing_{beam} | (mm) | 14 20 |
| Recommended mirror distance m1 | m1 | (mm) | 17.0 25.6 |
| Recommended mirror distance m2 | m2 | (mm) | 32.5 27.5 |
| Recommended mirror distance m2 _{mechanical} | m2 _m | (mm) | 27.9 22.9 |
| Scan angle | $\pm\theta_{x,y}$ | (°) | ± 14.8 ± 7.8 |
| Scan area | 2x * 2y | (mm ²) | 84 x 84 44 x 44 |
| Spot diameter | \varnothing_{spot} | (μ m) | 20 15 |
| Telecentric error (maximum deviation) | DT | (°) | 8.6 4.7 |
| Total transmission @ 940 - 980nm | T | (%) | 97 |
| Focused back reflex positions from first surface | | (mm) | 6.8; 14.5; 40.4; 41.1; 45.7 |
| Weight | | (g) | 795 |
| Protective glass | PG | | 4401-527-004-00 |

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

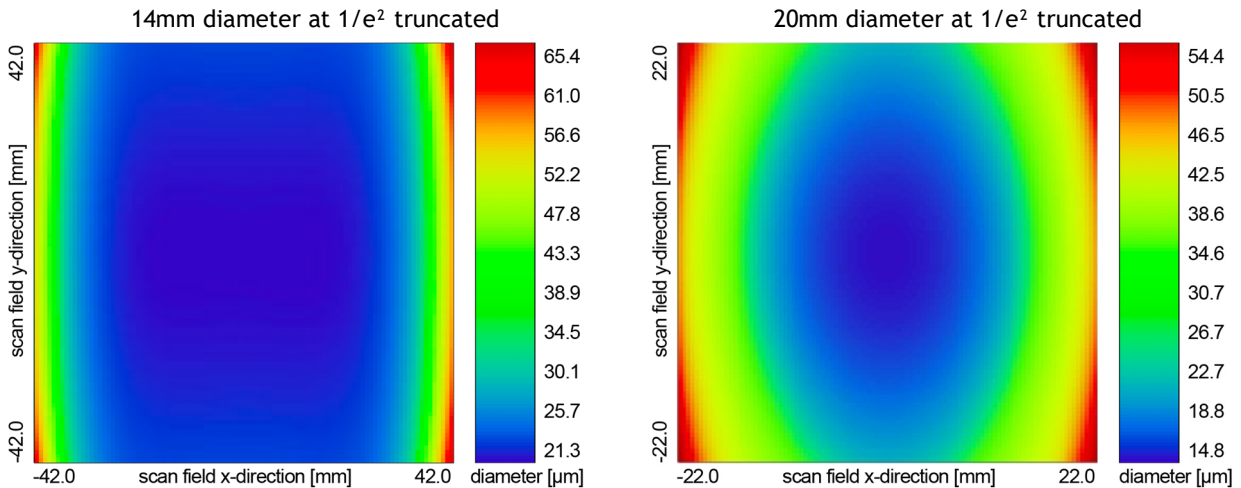
Mechanical drawing



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



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.