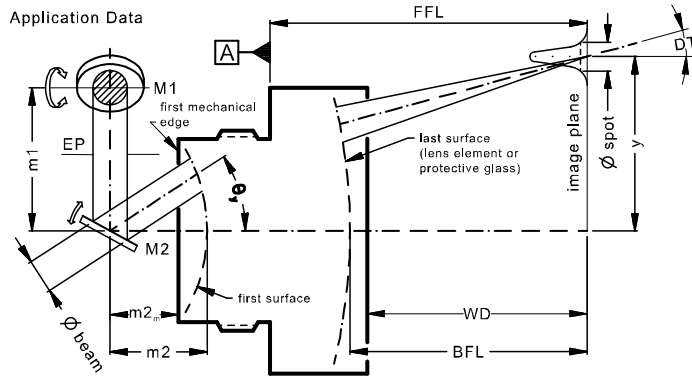


LINOS F-Theta-Ronar Lens

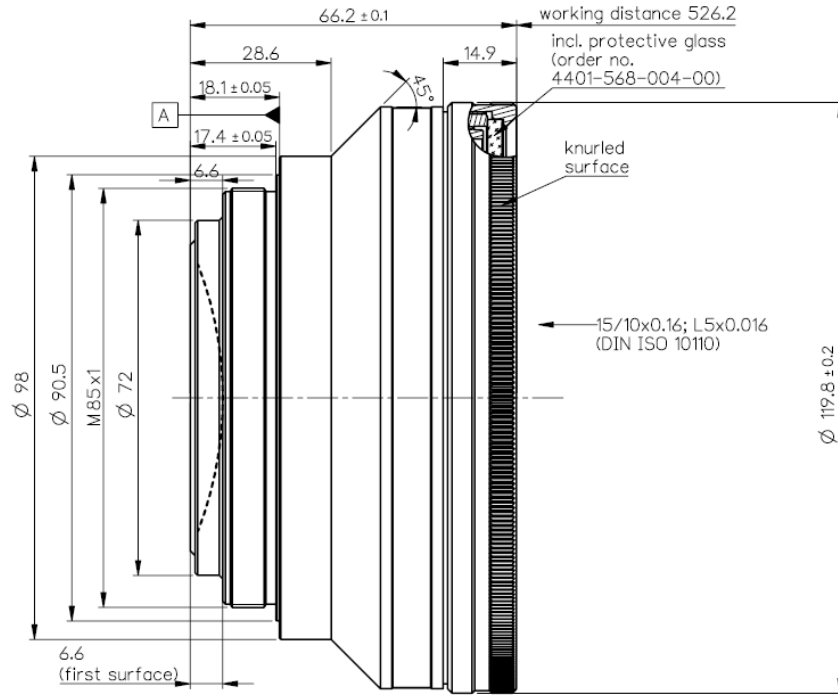
f = 437mm, 1900-2000nm, fused silica



Part number	4401-568-000-21			
Design wavelength	λ	(nm)	1940	
Effective focal length	EFL	(mm)	436.6	
Back focal length	BFL	(mm)	529.1	
Working distance	WD	(mm)	526.2	
Flange focal length	FFL	(mm)	574.3	
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)	29.5	28.0
Recommended mirror distance $m2_{\text{mechanical}}$	$m2_m$	(mm)	22.9	21.4
Scan angle	$\pm\theta_{x,y}$	($^\circ$)	19.2	14.8
Scan area (edge length of scan field)	$2x * 2y$	(mm^2)	292 x 292	226 x 226
Spot diameter	$\varnothing_{\text{spot}}$	(μm)	100	77
Telecentric error (maximum deviation)	DT	($^\circ$)	17.0	13.4
Total transmission @ 1940nm	T	(%)	> 95	
Focused back reflex positions from first surface		(mm)	37.6; 66.3	
Weight		(g)	1000	
Protective glass	PG		4401-568-004-00	

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

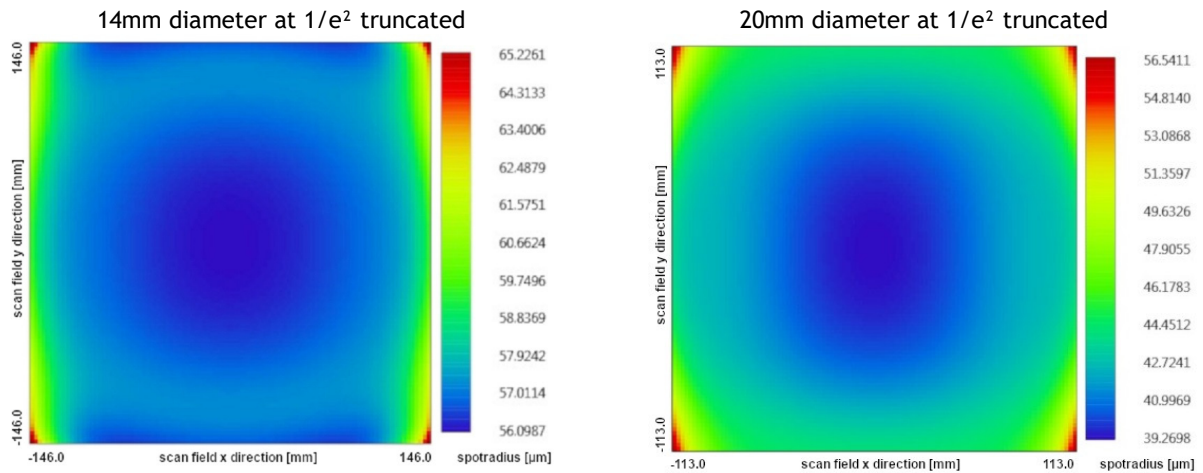
Mechanical drawing



Dimensions without tolerances are nominal values and illustration not to scale

Spot variation over 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, 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.