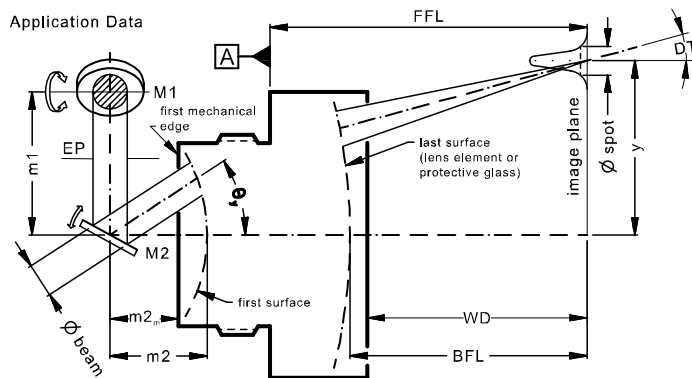


# LINOS F-Theta-Ronar Lens

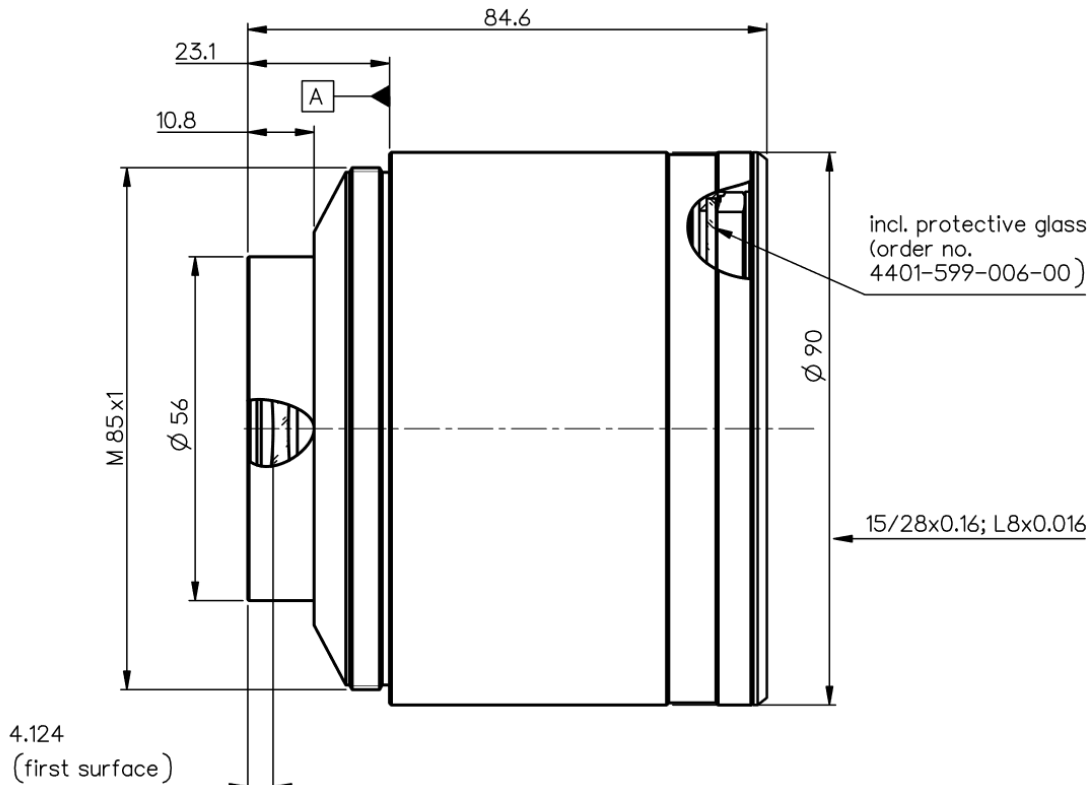
$f = 75\text{mm}$ , 515-540nm, telecentric, fused silica, low absorption



Part number	4401-599-000-26				
Design wavelength	$\lambda$	(nm)	532		
Effective focal length	EFL	(mm)	75.0		
Back focal length	BFL	(mm)	94.1		
Working distance	WD	(mm)	85.8		
Flange focal length	FFL	(mm)	147.3		
Beam diameter $1/e^2$ truncated	$\varnothing_{\text{beam}}$	(mm)	10.0	14.0	15.0
Recommended mirror distance m1	m1	(mm)	13.0	17.0	18.4
Recommended mirror distance m2	m2	(mm)	23.5	23.5	23.5
Recommended mirror distance $m2_{\text{mechanical}}$	$m2_m$	(mm)	19.4	19.4	19.4
Scan angle	$\pm\theta_{x,y}$	(°)	10.6	9.5	8.6
Scan area (edge length of scan field)	$2x * 2y$	(mm <sup>2</sup> )	27 x 27	24 x 24	22 x 22
Spot diameter	$\varnothing_{\text{spot}}$	( $\mu\text{m}$ )	7	5	4
Telecentric error (maximum deviation)	DT	(°)	1.3	1.4	1.3
Total transmission @ 515 - 540nm	T	(%)	> 96		
Group delay dispersion at $\lambda$	GDD	(fs <sup>2</sup> )	3257		
LIDT coating @ 532nm, 8ns, 100Hz		(J/cm <sup>2</sup> )	20		
LIDT coating @ 515nm, 204fs, 50kHz		(J/cm <sup>2</sup> )	0.6		
Focused back reflex positions from first surface		(mm)	2.53 ; 2.72; 31.42		
Weight		(g)	923		
Protective glass	PG		4401-599-006-00		

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

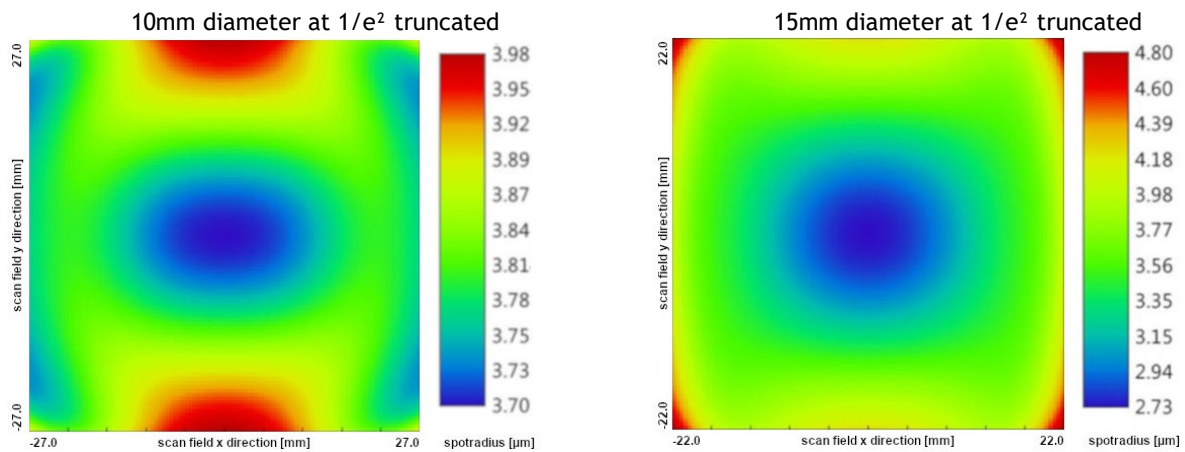
## Mechanical drawing



Dimensions without tolerances are nominal values and drawing not to scale

## Spot variation over scanfield

Spot radius in  $\mu\text{m}$  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.