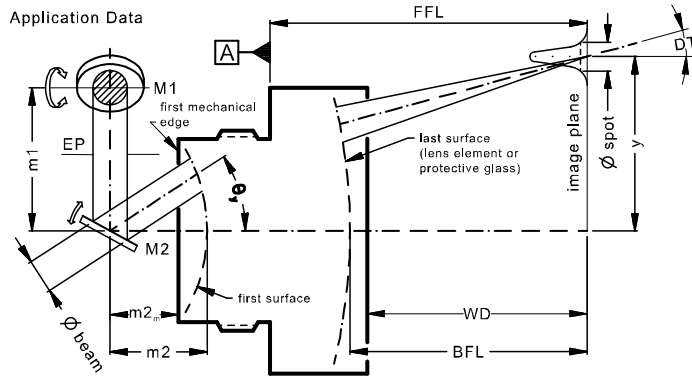


# LINOS F-Theta-Ronar Lens

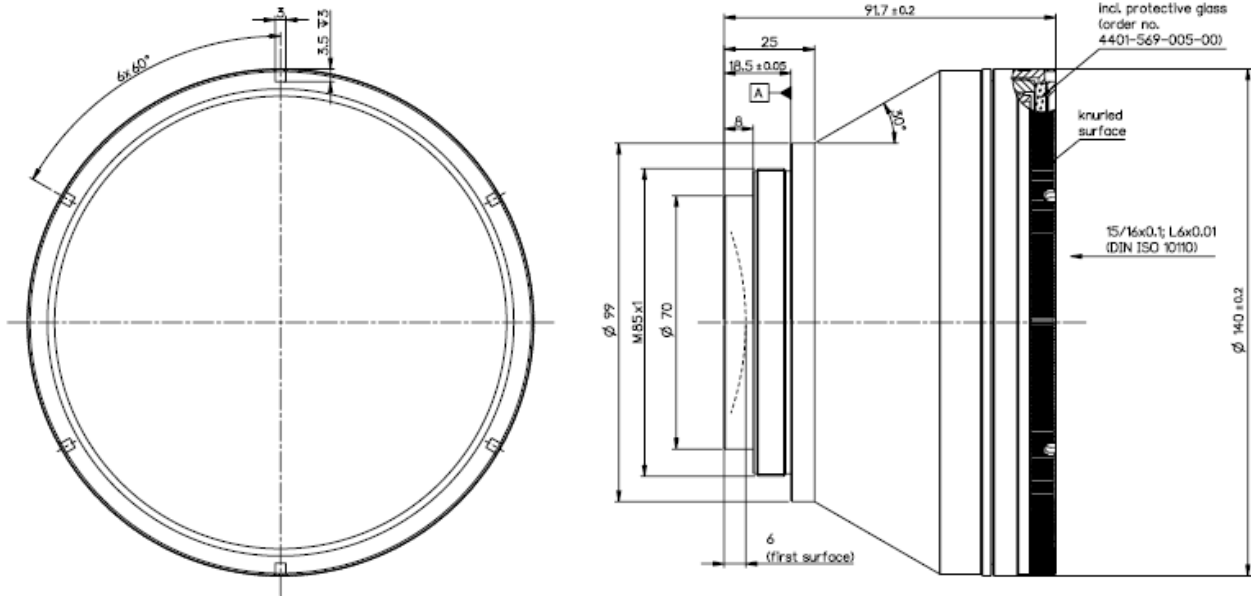
f = 354mm, 1900-2000nm, fused silica



Part number	4401-569-000-21			
Design wavelength	$\lambda$	(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 <sup>2</sup> 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 <sub>mechanical</sub>	m2 <sub>m</sub>	(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 <sup>2</sup> )	214 x 214	179 x 179
Spot diameter	$\varnothing_{\text{spot}}$	( $\mu\text{m}$ )	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

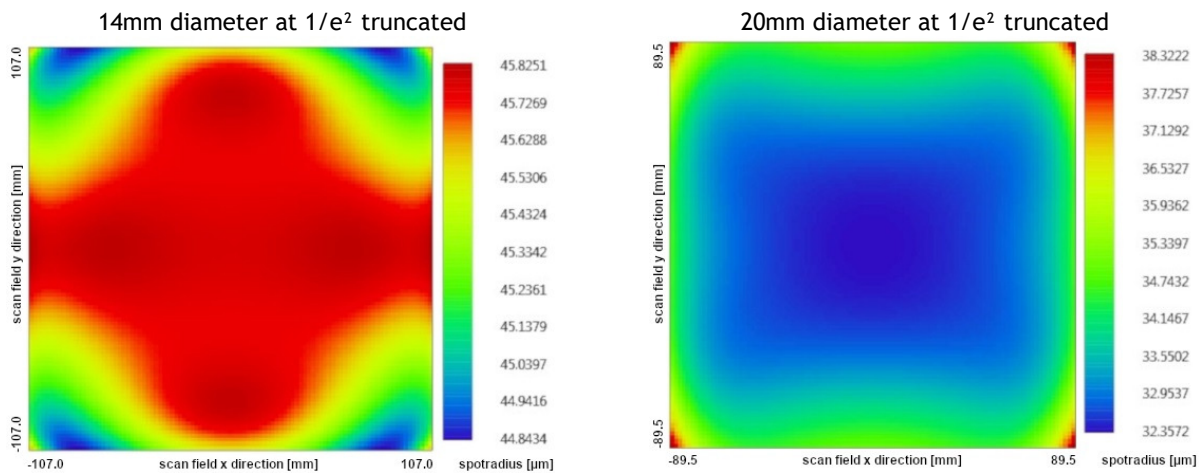


Dimensions without tolerances are nominal values and illustration not to scale

## Spot variation over 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, 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.