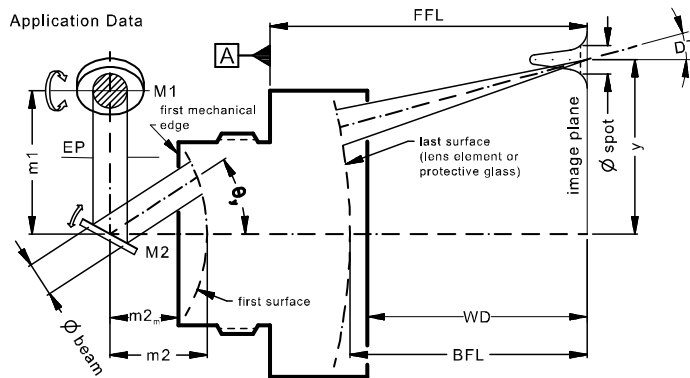


# LINOS F-Theta-Ronar Lens

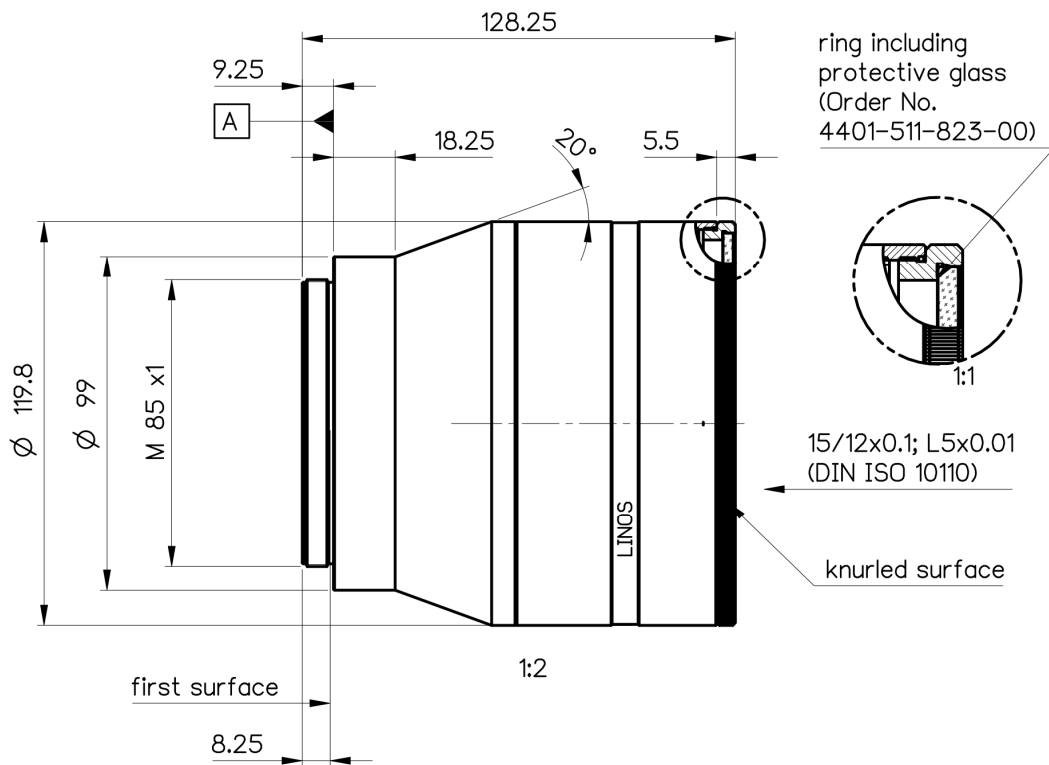
$f = 167\text{mm}$ , 340-360nm, telecentric, fused silica



Part number	4401-511-000-21		
Design wavelength	$\lambda$	(nm)	355
Effective focal length	EFL	(mm)	166.9
Back focal length	BFL	(mm)	255.8
Working distance	WD	(mm)	255.0
Flange focal length	FFL	(mm)	374.1
Beam diameter 1/e <sup>2</sup> truncated	$\varnothing_{\text{beam}}$	(mm)	10.0
Recommended mirror distance m1	m1	(mm)	13.0
Recommended mirror distance m2	m2	(mm)	48.0
Recommended mirror distance m2 <sub>mechanical</sub>	m2 <sub>m</sub>	(mm)	39.8
Scan angle	$\pm\theta$	(°)	11.3
Scan area (edge length of scan field)	2x * 2y	(mm <sup>2</sup> )	65 x 65
Spot diameter	$\varnothing_{\text{spot}}$	( $\mu\text{m}$ )	13
Telecentric error (maximum deviation)	DT	(°)	1.0
Total transmission @ 340 - 360nm	T	(%)	> 96
Group delay dispersion at $\lambda$	GDD	(fs <sup>2</sup> )	9708
LIDT coating @ 355nm, 6ns, 100Hz		(J/cm <sup>2</sup> )	4
LIDT coating @ 343nm, 200fs, 1kHz		(J/cm <sup>2</sup> )	0.4
Focused back reflex positions from first surface		(mm)	4.9; 5.3; 8.3; 16.6; 27.3; 45.2
Weight		(g)	2500
Protective glass	PG		4401-511-823-00

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

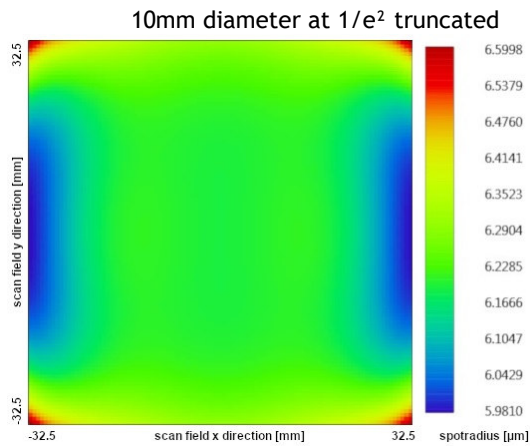
## Mechanical drawing



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



## 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.