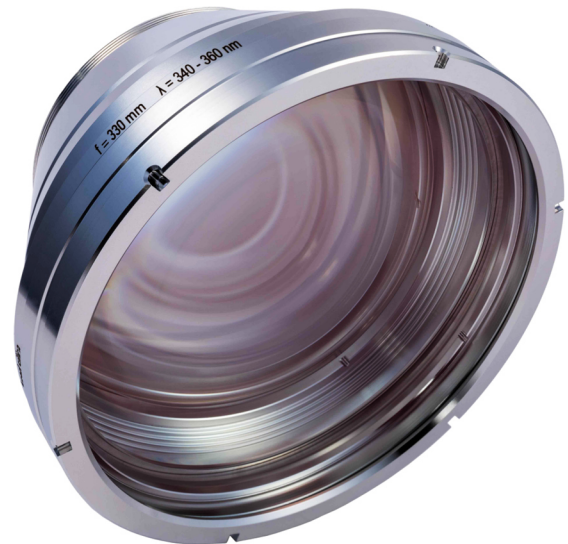
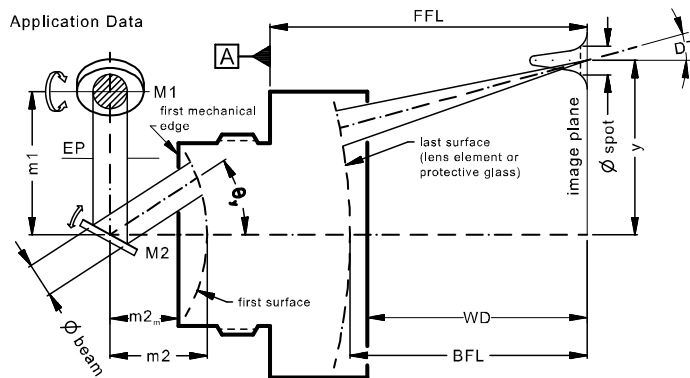


# LINOS F-Theta-Ronar Lens

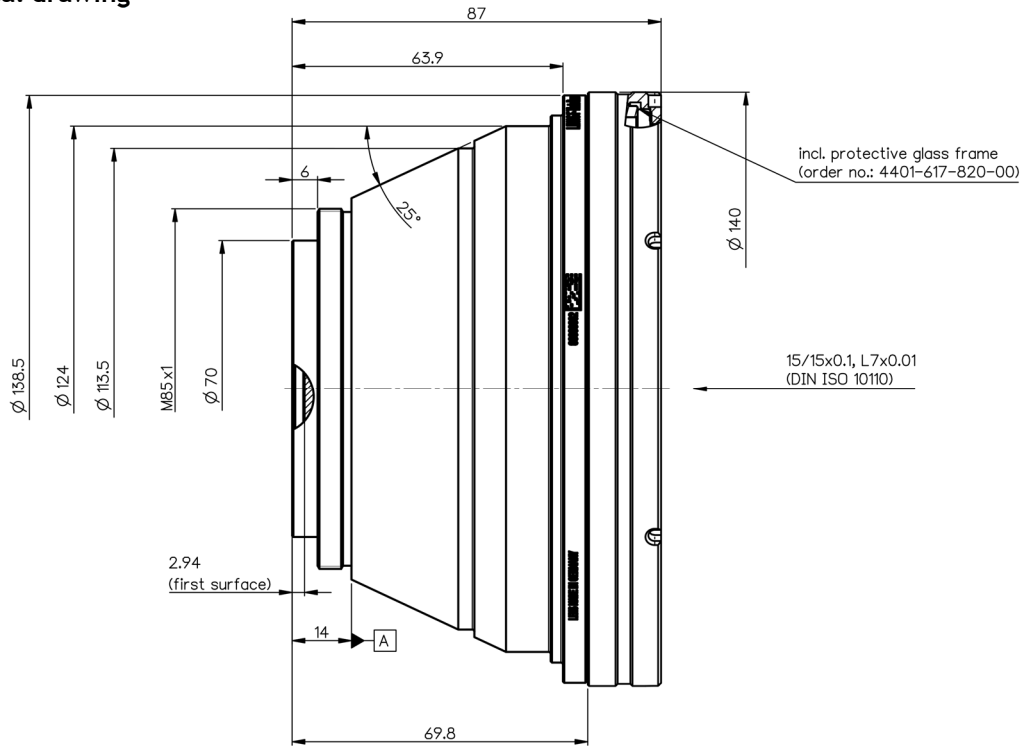
$f = 330\text{mm}$ , 340-360nm, fused silica, low outgassing



Part number	4401-617-000-28				
Design wavelength	$\lambda$	(nm)	355		
Material	Stainless Steel				
Effective focal length	EFL	(mm)	330.6		
Back focal length	BFL	(mm)	420.6		
Working distance	WD	(mm)	418.1		
Flange focal length	FFL	(mm)	491.1		
Beam diameter 1/e <sup>2</sup> truncated	$\varnothing_{\text{beam}}$	(mm)	10	14	15
Recommended mirror distance m1	m1	(mm)	12.8	17	18.4
Recommended mirror distance m2	m2	(mm)	25	25	25
Recommended mirror distance m2 <sub>mechanical</sub>	m2 <sub>m</sub>	(mm)	22.1	22.1	22.1
Scan angle	$\pm\theta_{x,y}$	(°)	19.8	18.6	18.3
Scan area (edge length of scan field)	2x * 2y	(mm <sup>2</sup> )	226 x 226	212 x 212	209 x 209
Spot diameter	$\varnothing_{\text{spot}}$	( $\mu\text{m}$ )	21	15	14
Telecentric error (maximum deviation)	DT	(°)	14.1	13.2	13.0
Total transmission @ 340 - 360nm	T	(%)	> 96		
Group delay dispersion at $\lambda$	GDD	(fs <sup>2</sup> )	7082		
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)	5.1 ; 17.2 ; 79.9 ; 81.5 ; 82.1		
Weight		(g)	2250		
Protective glass	PG		4401-617-820-00		

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

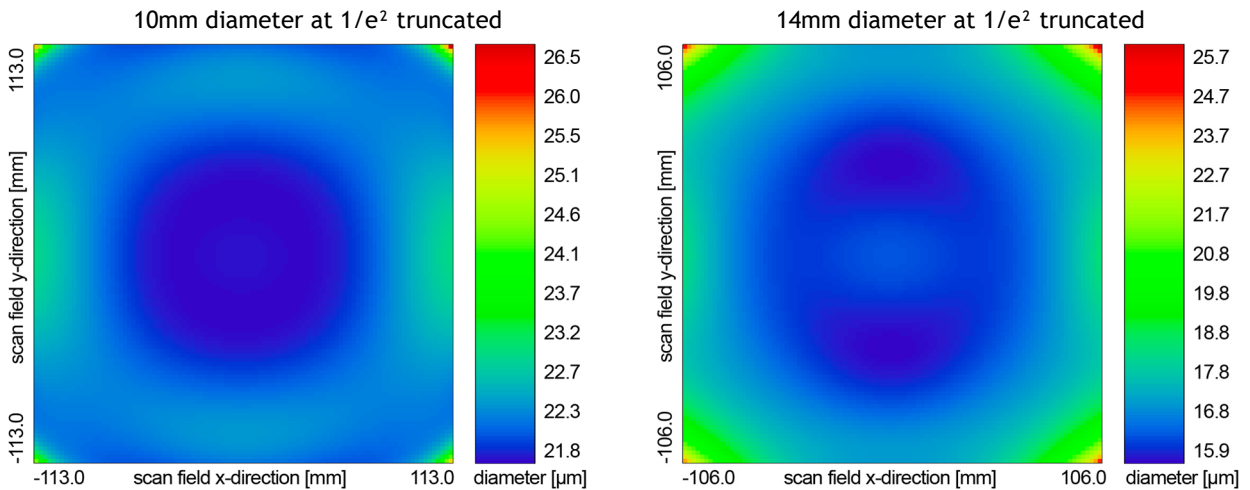
## Mechanical drawing



Dimensions without tolerances are nominal values and illustration not to scale

## Spot variation over scan field

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