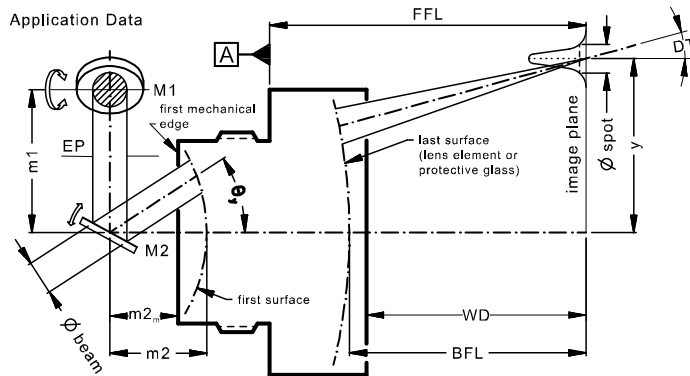


# LINOS F-Theta-Ronar Lens

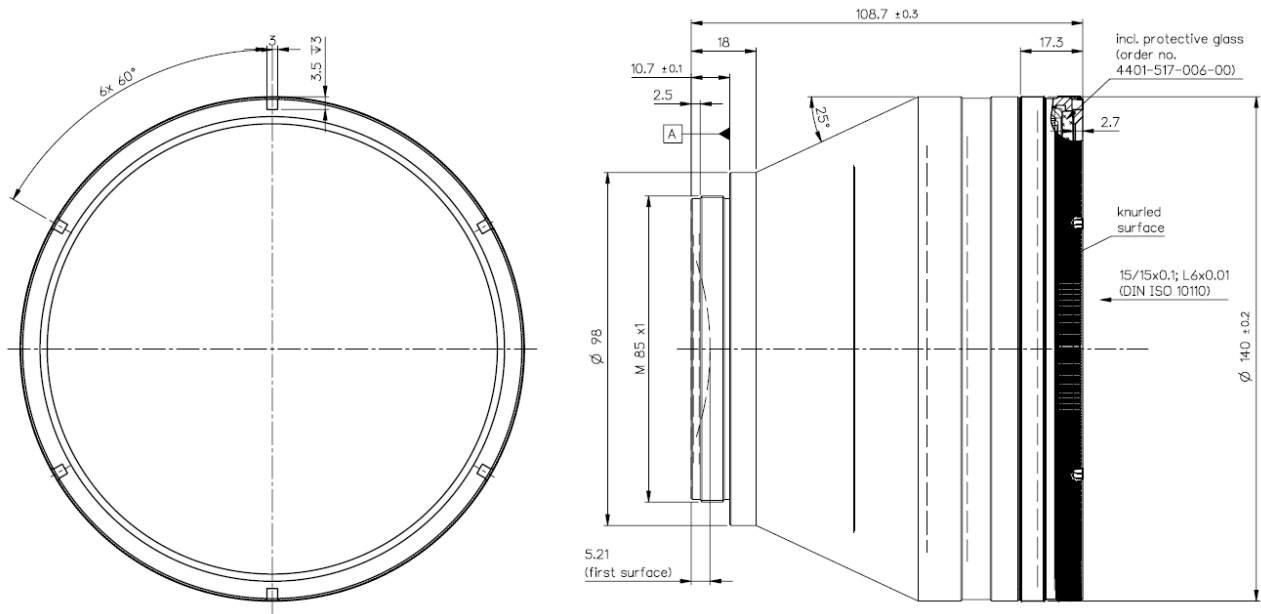
$f = 167\text{mm}$ , 515-540nm, telecentric, fused silica, low absorption



Part number	4401-517-000-26		
Design wavelength	$\lambda$	(nm)	532
Effective focal length	EFL	(mm)	166.1
Back focal length	BFL	(mm)	218.2
Working distance	WD	(mm)	215.5
Flange focal length	FFL	(mm)	313.4
Beam diameter 1/e <sup>2</sup> truncated	$\varnothing_{\text{beam}}$	(mm)	14.0
Recommended mirror distance m1	m1	(mm)	17.0
Recommended mirror distance m2	m2	(mm)	33.0
Recommended mirror distance m2 <sub>mechanical</sub>	m2 <sub>m</sub>	(mm)	27.8
Scan angle	$\pm\theta_{x,y}$	(°)	15.4
Scan area (edge length of scan field)	2x * 2y	(mm <sup>2</sup> )	86 x 86
Spot diameter	$\varnothing_{\text{spot}}$	( $\mu\text{m}$ )	12
Telecentric error (maximum deviation)	DT	(°)	3.4
Total transmission @ 515 - 540nm	T	(%)	> 96
Group delay dispersion at $\lambda$	GDD	(fs <sup>2</sup> )	4879
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)	3.3; 4.5; 6.1; 10.1; 14.7; 15.1; 40.0
Weight		(g)	2250
Protective glass	PG		4401-517-006-00

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

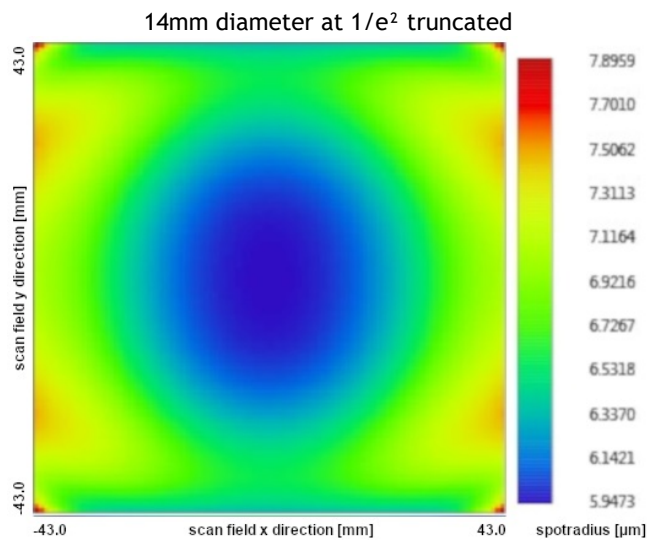
## Mechanical drawing



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.