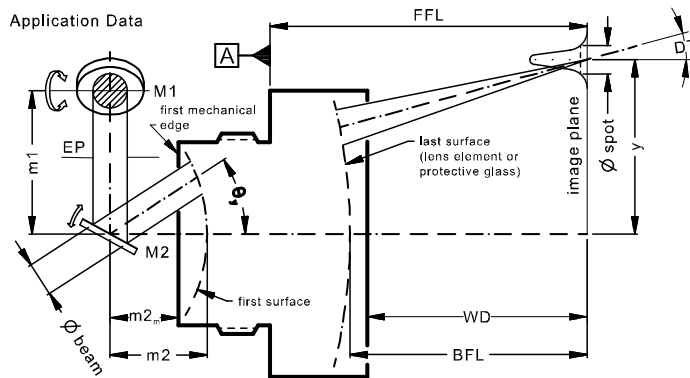


# LINOS F-Theta-Ronar Lens

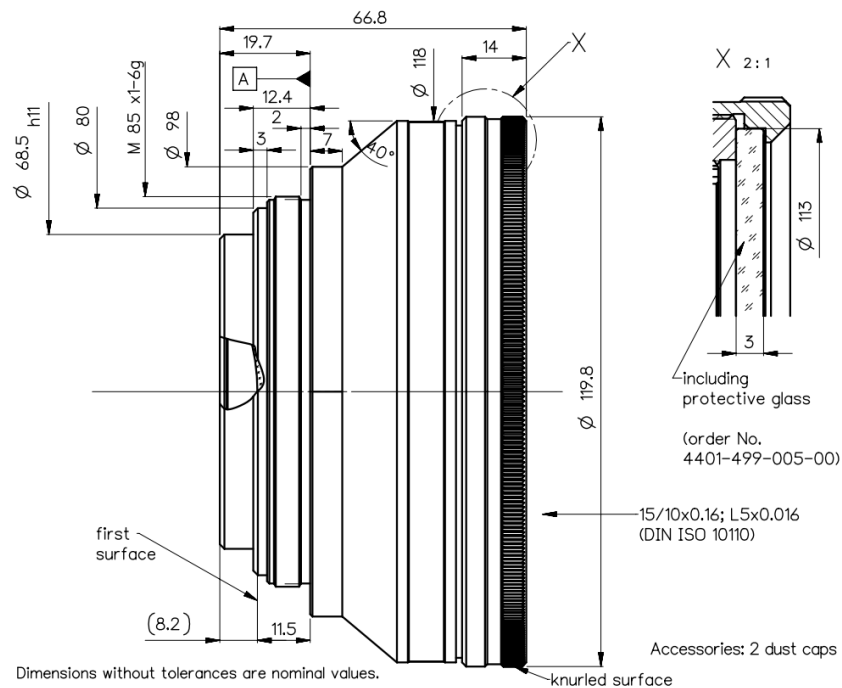
f = 255mm, 1030-1080nm, fused silica, low absorption



Part number	4401-499-000-26		
Design wavelength	$\lambda$	(nm)	1064
Effective focal length	EFL	(mm)	255.0
Back focal length	BFL	(mm)	320.0
Working distance	WD	(mm)	317.4
Flange focal length	FFL	(mm)	364.2
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)	25.0
Recommended mirror distance m2 <sub>mechanical</sub>	m2 <sub>m</sub>	(mm)	16.8
Scan angle	$\pm\theta$	(°)	21.2
Scan area (edge length of scan field)	2x * 2y	(mm <sup>2</sup> )	187 x 187
Spot diameter	$\varnothing_{\text{spot}}$	( $\mu\text{m}$ )	50
Telecentric error (maximum deviation)	DT	(°)	15.5
Total transmission @ 1030 - 1080nm	T	(%)	> 96
Group delay dispersion at $\lambda$	GDD	(fs <sup>2</sup> )	831
LIDT coating @ 1064nm, 12ns, 100Hz		(J/cm <sup>2</sup> )	40
LIDT coating @ 1030nm, 291fs, 5kHz		(J/cm <sup>2</sup> )	0.9
Focused back reflex positions from first surface		(mm)	3.0; 5.8; 22.9; 43.9; 72.5; 73.1
Weight		(g)	990
Protective glass	PG		4401-499-005-00

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

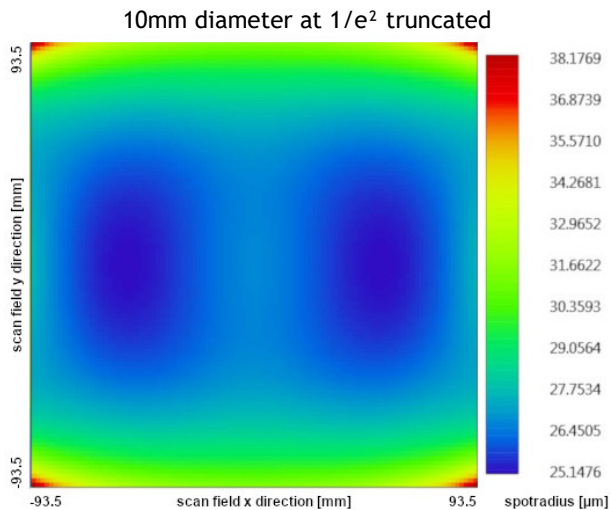
## Mechanical drawing



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.