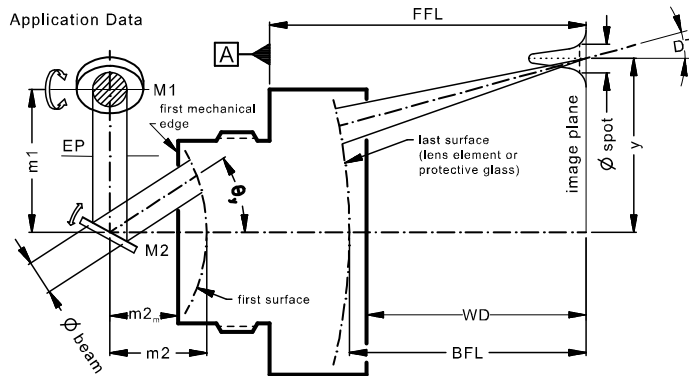


# LINOS F-Theta-Ronar Lens

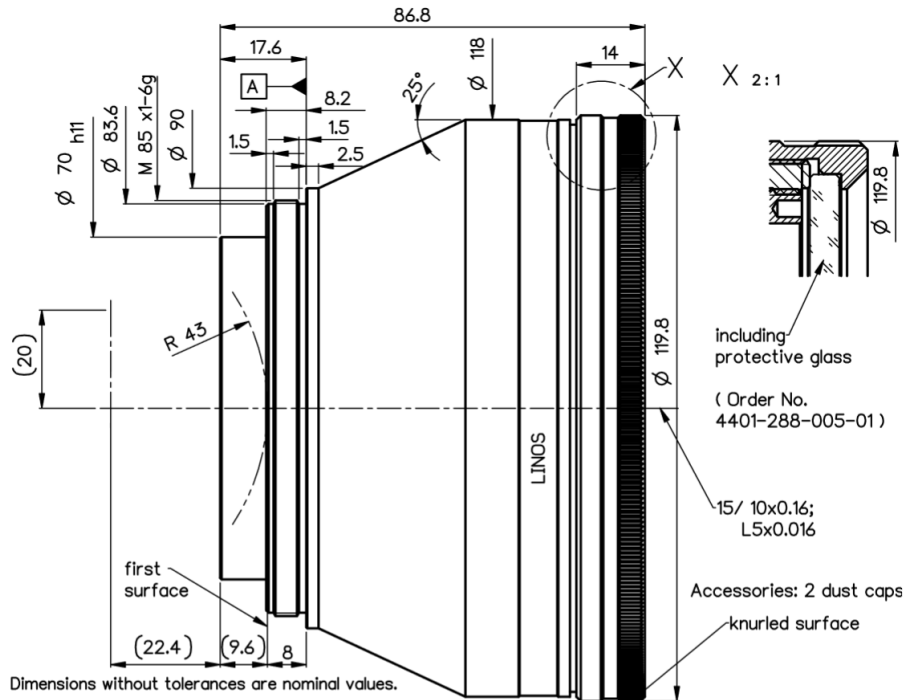
f = 100mm, 1064nm, telecentric



Part number	4401-464-000-21		
Design wavelength	$\lambda$	(nm)	1064
Effective focal length	EFL	(mm)	100.1
Back focal length	BFL	(mm)	128.9
Working distance	WD	(mm)	126.0
Flange focal length	FFL	(mm)	195.2
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)	28.5
Recommended mirror distance m2 <sub>mechanical</sub>	m2 <sub>m</sub>	(mm)	18.9
Scan angle	$\pm\theta_{x,y}$	(°)	17.0
Scan area	2y	(mm <sup>2</sup> )	57 x 57
Spot diameter	$\varnothing_{\text{spot}}$	( $\mu\text{m}$ )	14
Telecentric error (maximum deviation)	DT	(°)	0.1
Total transmission @ 1064nm	T	(%)	> 96
LIDT coating @ 1064nm, 9ns, 100Hz		(J/cm <sup>2</sup> )	10
Focused back reflex positions from first surface		(mm)	2.3; 6.2; 6.5; 21.6; 66.7
Weight		(g)	1850
Protective glass	PG		4401-288-005-01

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

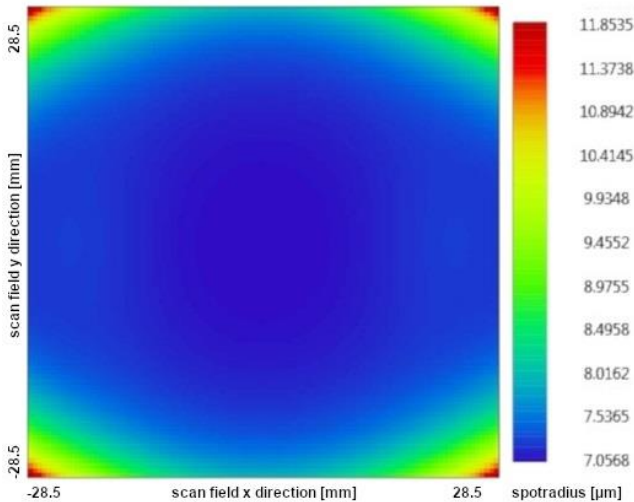
**Mechanical drawing**



**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  $\leq 1\%$

14mm diameter at  $1/e^2$  truncated



**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.

Entrance lens made of fused silica.