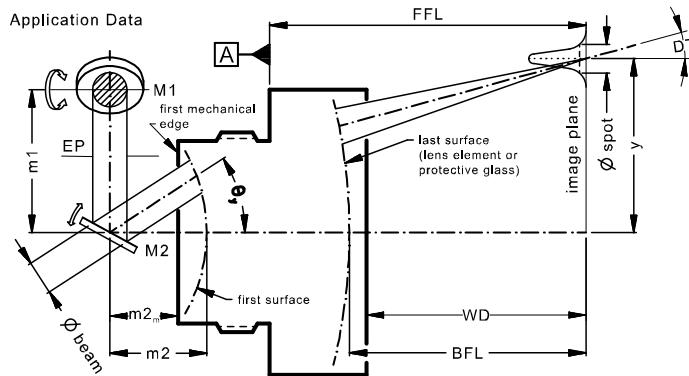


LINOS F-Theta-Ronar Lens

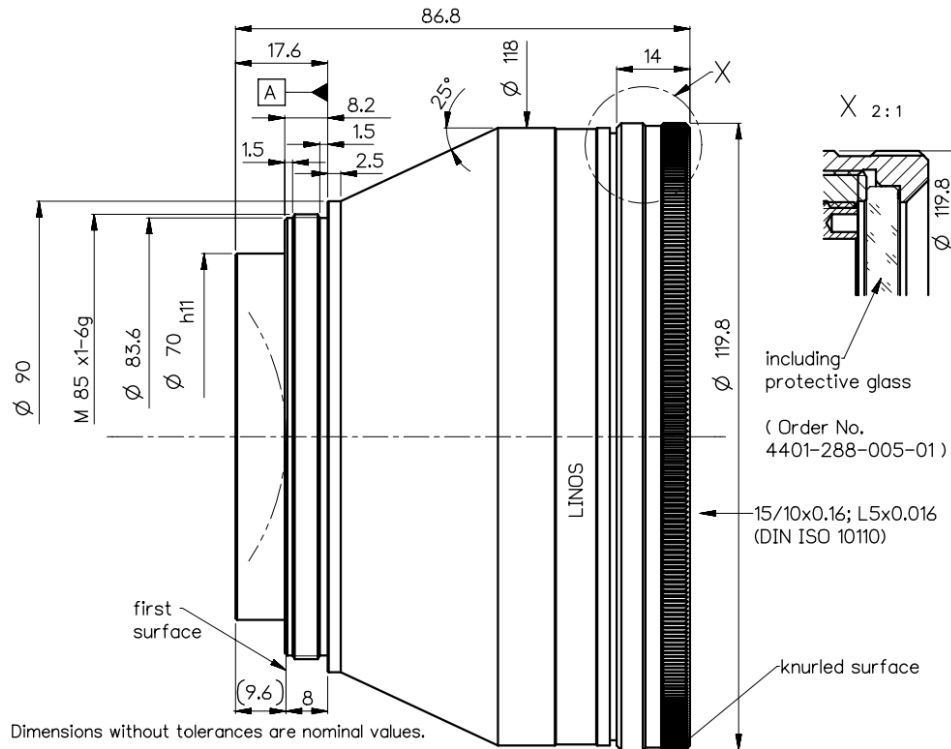
f = 100mm, 1064nm, telecentric



Part number	4401-464-000-21		
Design wavelength	λ	(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 ² 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 _{mechanical}	m2 _m	(mm)	18.9
Scan angle	$\pm\theta_{x,y}$	(°)	17.0
Scan area (edge length of scan field)	2x * 2y	(mm ²)	57 x 57
Spot diameter	$\varnothing_{\text{spot}}$	(μm)	14
Telecentric error (maximum deviation)	DT	(°)	0.1
Total transmission @ 1064nm	T	(%)	> 96
LIDT coating @ 1064nm, 9ns, 100Hz		(J/cm ²)	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

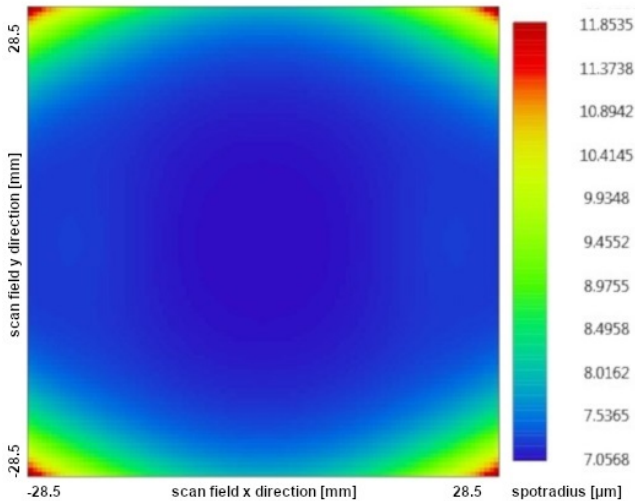
Mechanical drawing



Spot variation over scanfield

Spot radius in μm 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.