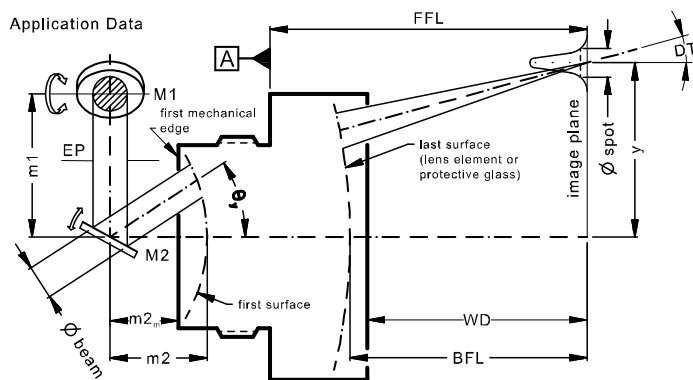


LINOS F-Theta-Ronar Lens

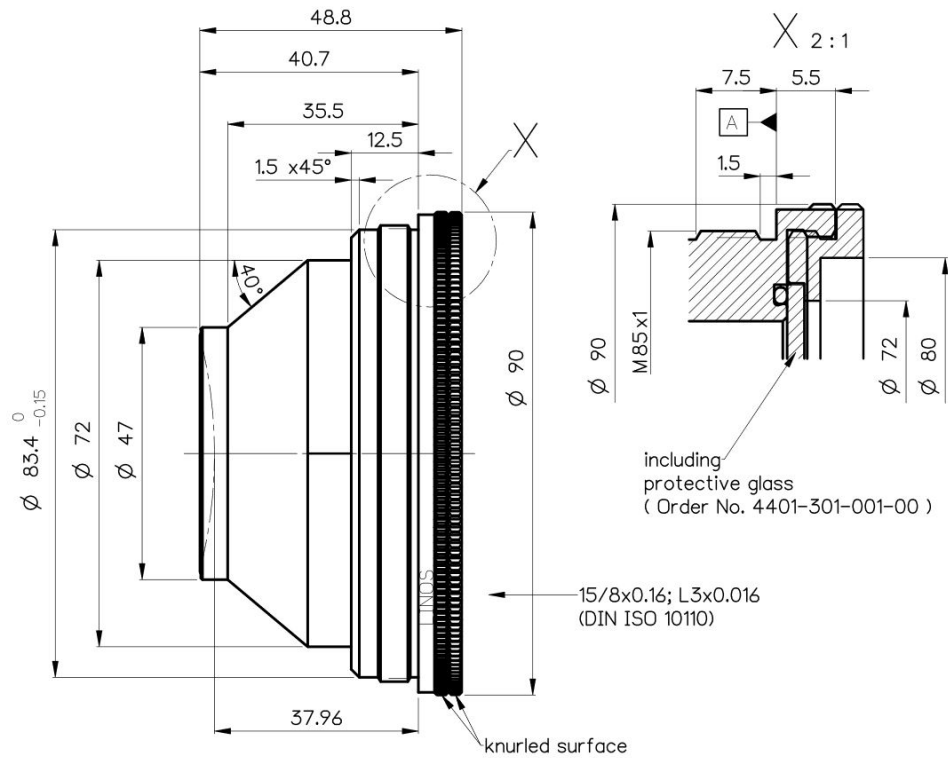
f = 160mm, 1064nm



Part number	4401-301-000-21		
Design wavelength	λ	(nm)	1064
Effective focal length	EFL	(mm)	160.3
Back focal length	BFL	(mm)	181.8
Working distance	WD	(mm)	176.2
Flange focal length	FFL	(mm)	184.4
Beam diameter 1/e ² truncated	$\varnothing_{\text{beam}}$	(mm)	12.0
Recommended mirror distance m1	m1	(mm)	16.0
Recommended mirror distance m2	m2	(mm)	12.0
Recommended mirror distance m2 _{mechanical}	m2 _m	(mm)	9.3
Scan angle	$\pm\theta_{x,y}$	(°)	17.7
Scan area (edge length of scan field)	2x * 2y	(mm ²)	99 x 99
Spot diameter	$\varnothing_{\text{spot}}$	(μm)	26
Total transmission @ 1064nm	T	(%)	> 96
LIDT coating @ 1064nm, 9ns, 100Hz		(J/cm ²)	10
Focused back reflex positions from first surface		(mm)	9.2; 16.2; 44.2; 44.5; 44.6
Weight		(g)	365
Protective glass	PG		4401-301-001-00

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

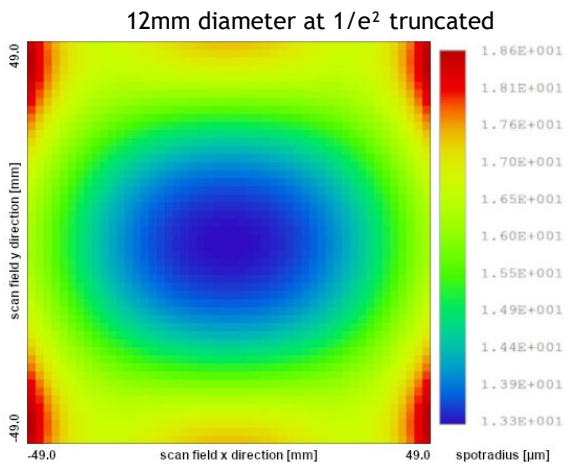
Mechanical drawing



Dimensions without tolerances are nominal values and illustration not to scale

Spot variation over scanfield

Spot radius in 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



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.