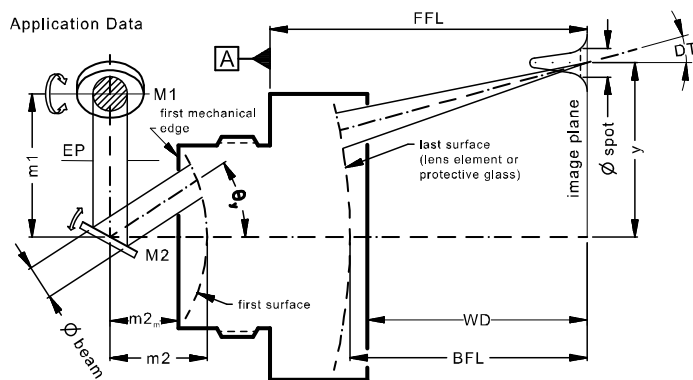


LINOS F-Theta-Ronar Lens

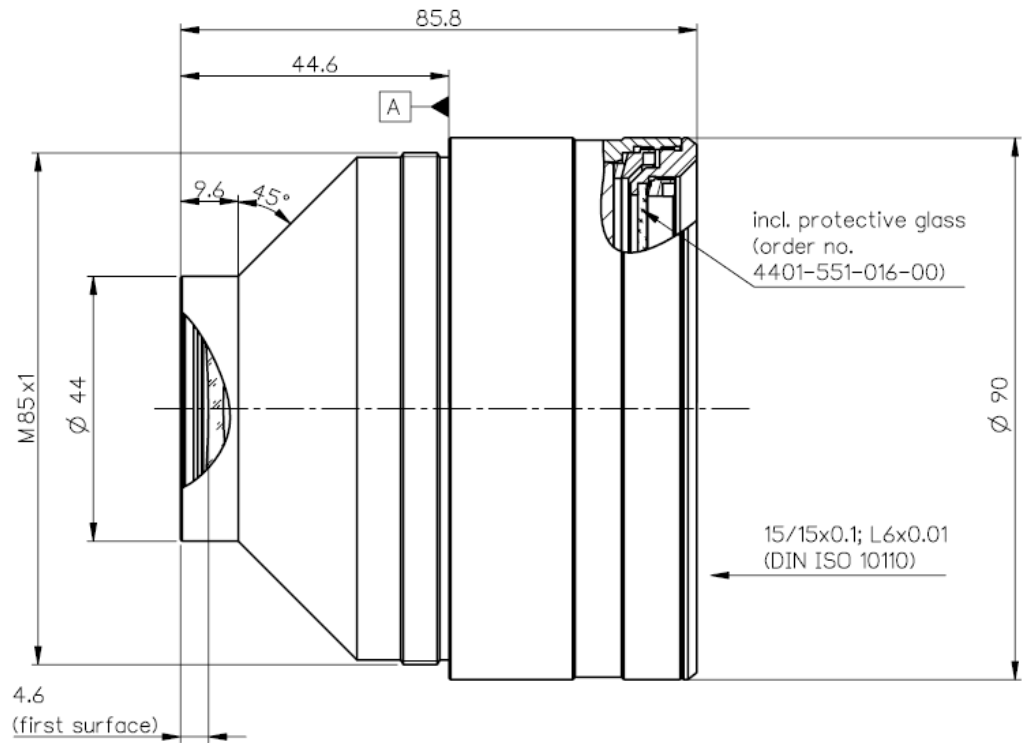
f = 70mm, 1030-1080nm, telecentric, fused silica, low absorption



Part number	4401-551-000-26			
Design wavelength	λ	(nm)	1064	
Effective focal length	EFL	(mm)	70.4	
Back focal length	BFL	(mm)	95.9	
Working distance	WD	(mm)	87.5	
Flange focal length	FFL	(mm)	128.8	
Beam diameter 1/e ² truncated	$\varnothing_{\text{beam}}$	(mm)	10.0	14.0
Recommended mirror distance m1	m1	(mm)	13.0	17.0
Recommended mirror distance m2	m2	(mm)	16.4	17.1
Recommended mirror distance m2 _{mechanical}	m2 _m	(mm)	11.8	12.5
Scan angle	$\pm\theta_{x,y}$	(°)	13.1	10.9
Scan area	2y	(mm ²)	31 x 31	26 x 26
Spot diameter	$\varnothing_{\text{spot}}$	(μm)	14	10
Telecentric error (maximum deviation)	DT	(°)	1.8	1.8
Total transmission @ 1030 - 1080nm	T	(%)	> 96	
Group delay dispersion at λ	GDD	(fs ²)	970	
LIDT coating @ 1064nm, 12ns, 100Hz		(J/cm ²)	40	
LIDT coating @ 1030nm, 291fs, 5kHz		(J/cm ²)	0.9	
Focused back reflex positions from first surface		(mm)	1.5; 71.6	
Weight		(g)	752	
Protective glass	PG		4401-551-016-00	

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

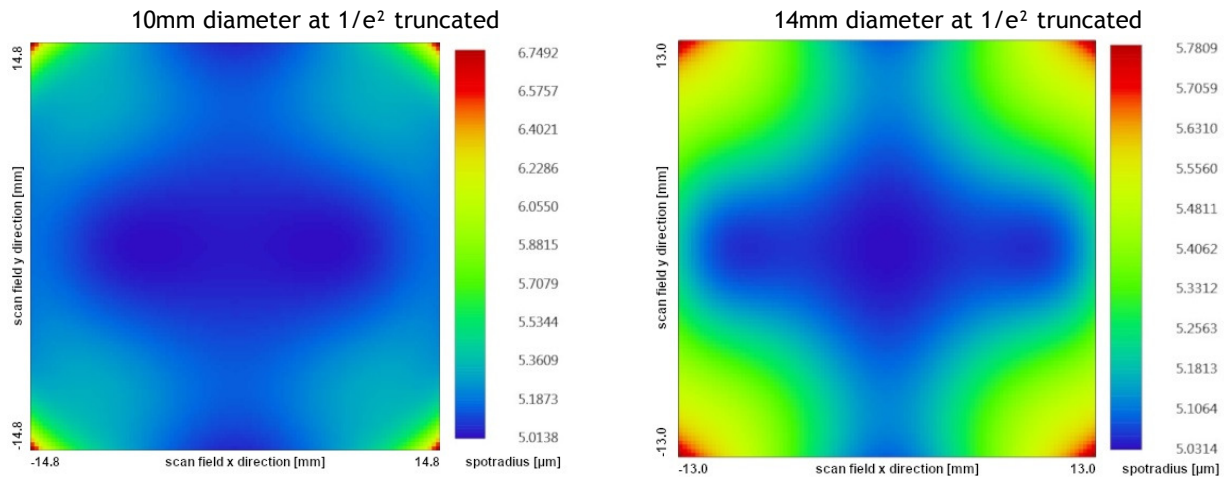
Mechanical drawing



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, 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.