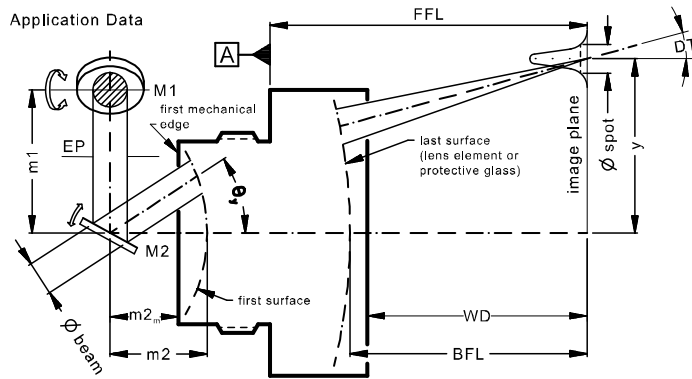


LINOS F-Theta-Ronar Lens

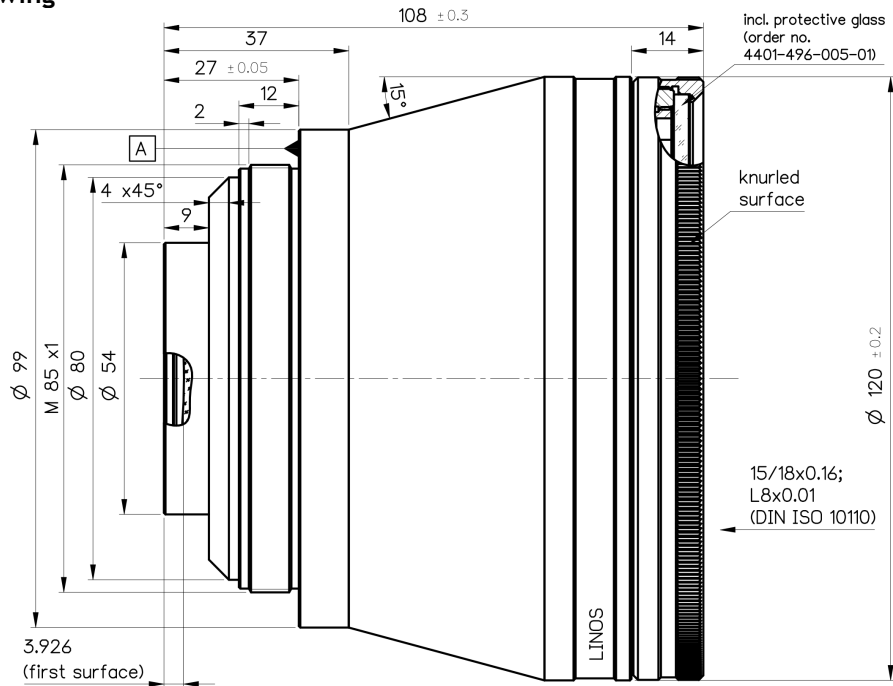
$f = 100\text{mm}$, 515-540nm, telecentric, fused silica, low absorption



Part number	4401-547-000-26			
Design wavelength	λ	(nm)	532	
Effective focal length	EFL	(mm)	104.7	
Back focal length	BFL	(mm)	141.4	
Working distance	WD	(mm)	138.5	
Flange focal length	FFL	(mm)	219.5	
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)	28.0	28.0
Recommended mirror distance m2 _{mechanical}	m2 _m	(mm)	24.1	24.1
Scan angle	$\pm\theta_{x,y}$	(°)	13.1	12.2
Scan area (edge length of scan field)	2x * 2y	(mm ²)	46 x 46	43 x 43
Spot diameter	$\varnothing_{\text{spot}}$	(μm)	10	9
Telecentric error (maximum deviation)	DT	(°)	1.7	1.7
Total transmission @ 515 - 540nm	T	(%)	> 96	
Group delay dispersion at λ	GDD	(fs ²)	4951	
LIDT coating @ 532nm, 8ns, 100Hz		(J/cm ²)	20	
LIDT coating @ 515nm, 204fs, 50kHz		(J/cm ²)	0.6	
Focused back reflex positions from first surface		(mm)	3.1; 59.6	
Weight		(g)	1650	
Protective glass	PG		4401-496-005-01	

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

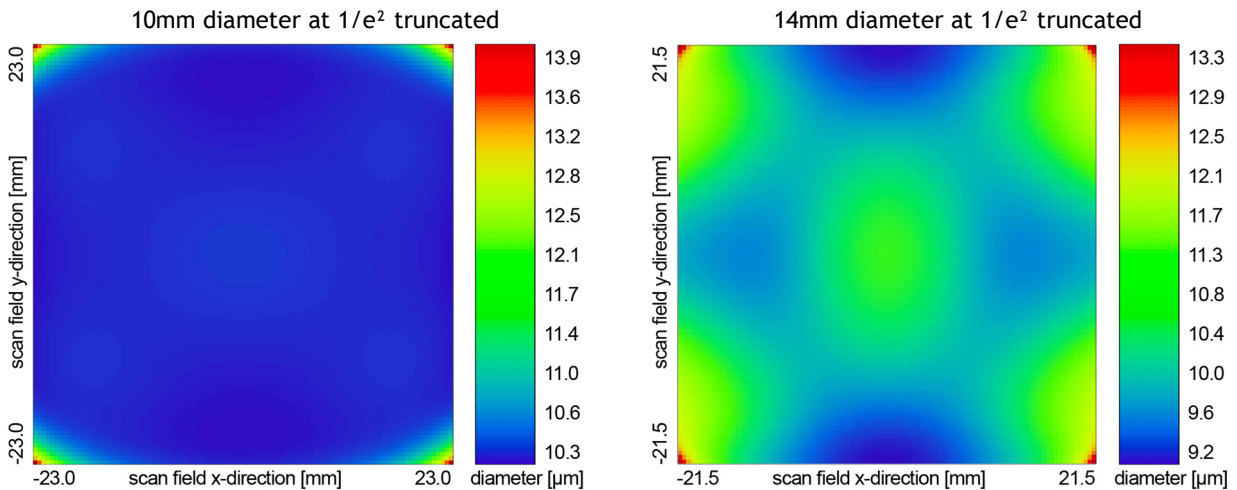
Mechanical drawing



Dimensions without tolerances are nominal values and illustration not to scale

Spot variation over scan field

Spot radius in μm at $1/e^2$ level for a Gaussian laser beam ($M^2=1$), focused over scan field
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.