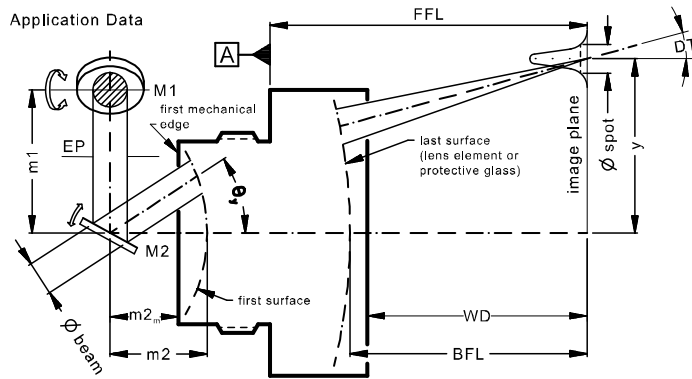


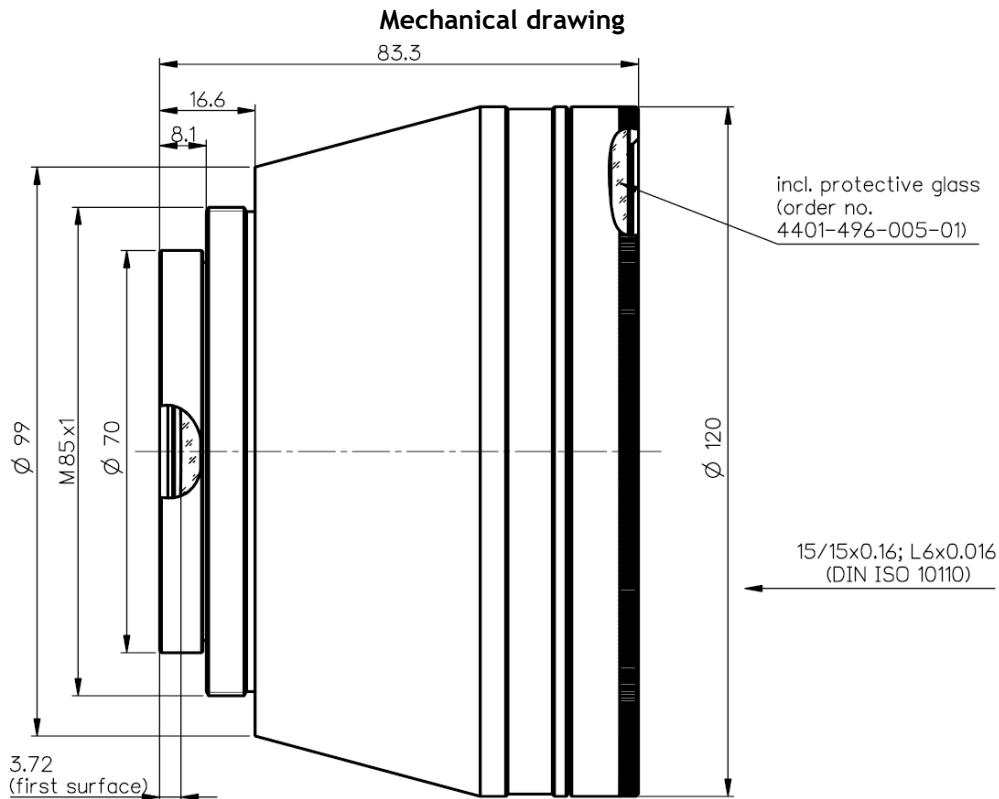
LINOS F-Theta-Ronar Lens

f = 420mm, 515-540nm, fused silica, low absorption



Part number	4401-590-000-26				
Design wavelength	λ	(nm)	532		
Effective focal length	EFL	(mm)	420.5		
Back focal length	BFL	(mm)	500.4		
Working distance	WD	(mm)	498.6		
Flange focal length	FFL	(mm)	565.3		
Beam diameter 1/e ² truncated	$\varnothing_{\text{beam}}$	(mm)	14.0	15.0	20.0
Recommended mirror distance m1	m1	(mm)	17.0	18.4	25.6
Recommended mirror distance m2	m2	(mm)	23.5	20.5	25.0
Recommended mirror distance m2 _{mechanical}	m2 _m	(mm)	19.8	16.8	21.3
Scan angle	$\pm\theta_{x,y}$	(°)	17.1	16.8	14.1
Scan area (edge length of scan field)	2x * 2y	(mm ²)	251 x 251	246 x 246	208 x 208
Spot diameter	$\varnothing_{\text{spot}}$	(μm)	29	27	21
Telecentric error (maximum deviation)	DT	(°)	15.0	14.9	12.3
Total transmission @ 515 - 540nm	T	(%)	> 96		
Group delay dispersion at λ	GDD	(fs ²)	3229		
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)	2.2; 5.0; 127.3; 128.0; 131.6; 148.7		
Weight		(g)	1270		
Protective glass	PG		4401-496-005-01		

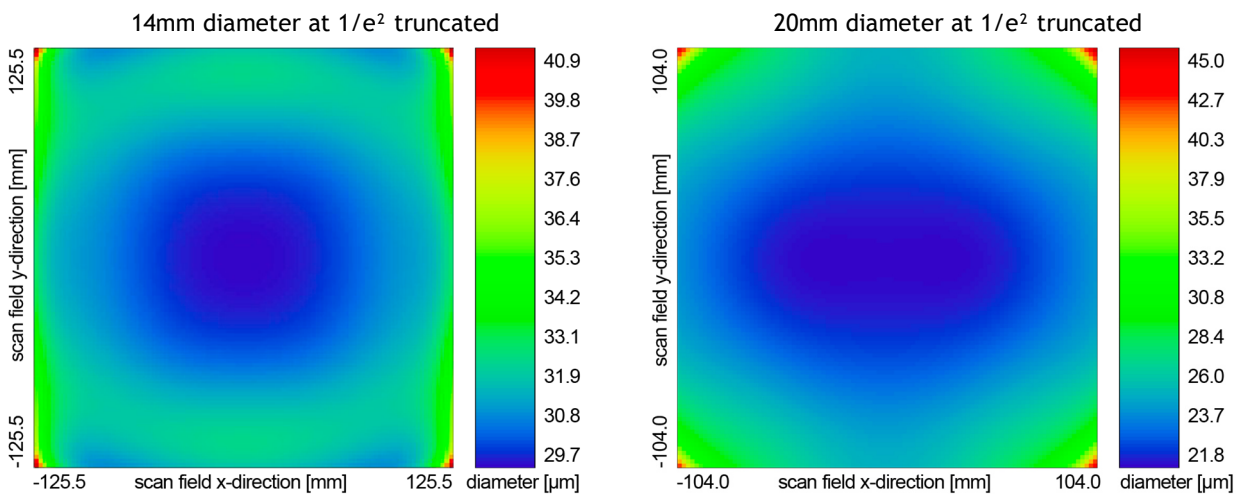
Optical parameters calculated for a 1-mirror system
 Subject to technical change



Dimensions without tolerances are nominal values and drawing 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



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.