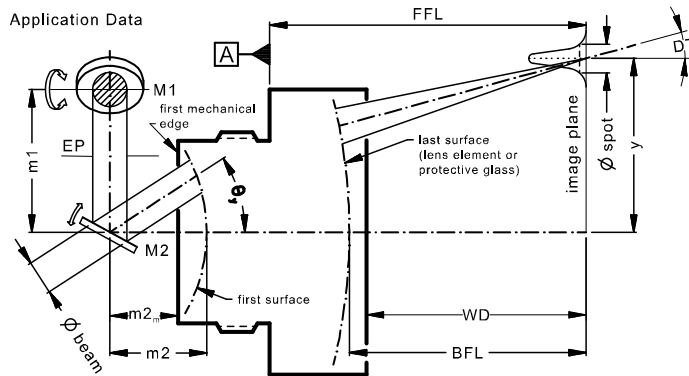


LINOS F-Theta-Ronar Lens

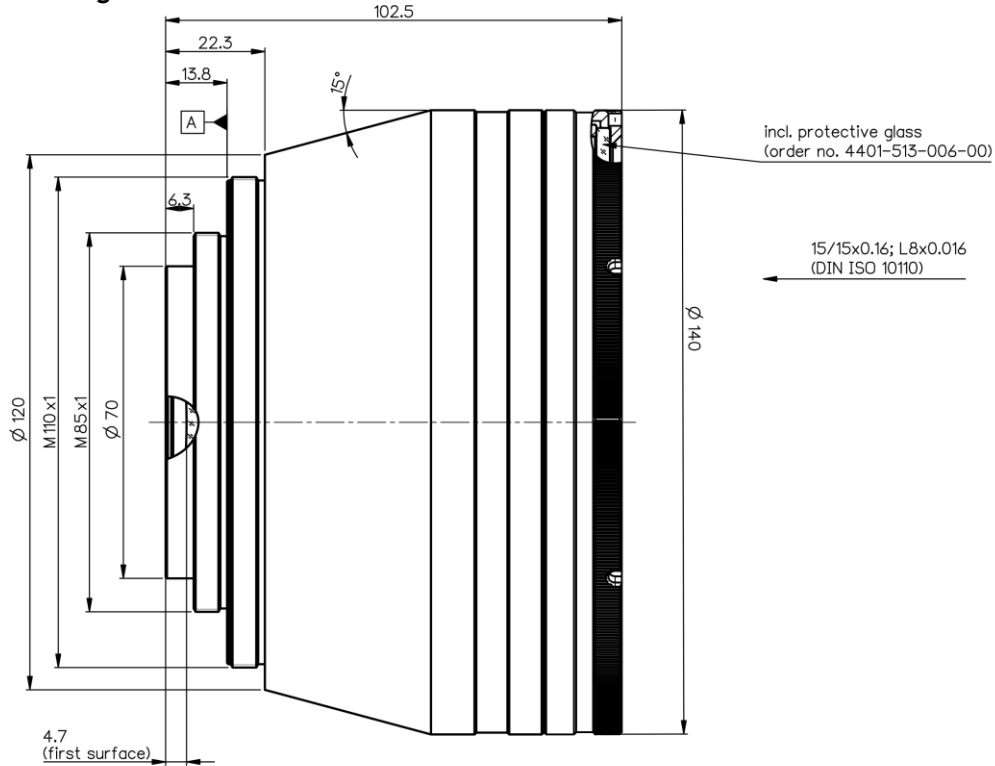
$f = 270\text{mm}$, 1030-1080nm, fused silica, low absorption



Part number	4401-604-000-26				
Design wavelength	λ	(nm)	1064		
Effective focal length	EFL	(mm)	270.1		
Back focal length	BFL	(mm)	354.5		
Working distance	WD	(mm)	352.0		
Flange focal length	FFL	(mm)	440.5		
Beam diameter 1/e ² truncated	$\varnothing_{\text{beam}}$	(mm)	14	20	30
Recommended mirror distance m1	m1	(mm)	17	25	37
Recommended mirror distance m2	m2	(mm)	27	32	35
Recommended mirror distance m2 _{mechanical}	m2 _m	(mm)	22.3	27.3	30.3
Scan angle	$\pm\theta_{x,y}$	(°)	17.3	14.8	9.1
Scan area (edge length of scan field)	2x * 2y	(mm ²)	158 x 158	136 x 136	84 x 84
Spot diameter	$\varnothing_{\text{spot}}$	(μm)	37	27	18
Telecentric error (maximum deviation)	DT	(°)	9.7	7.9	4.7
Total transmission @ 1030 - 1080nm	T	(%)	> 96		
Group delay dispersion at λ	GDD	(fs ²)	1230		
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)	8.41; 16.93; 20.30; 22.86; 53.05; 53.65; 62.39		
Weight		(g)	2331		
Protective glass	PG		4401-513-006-00		

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

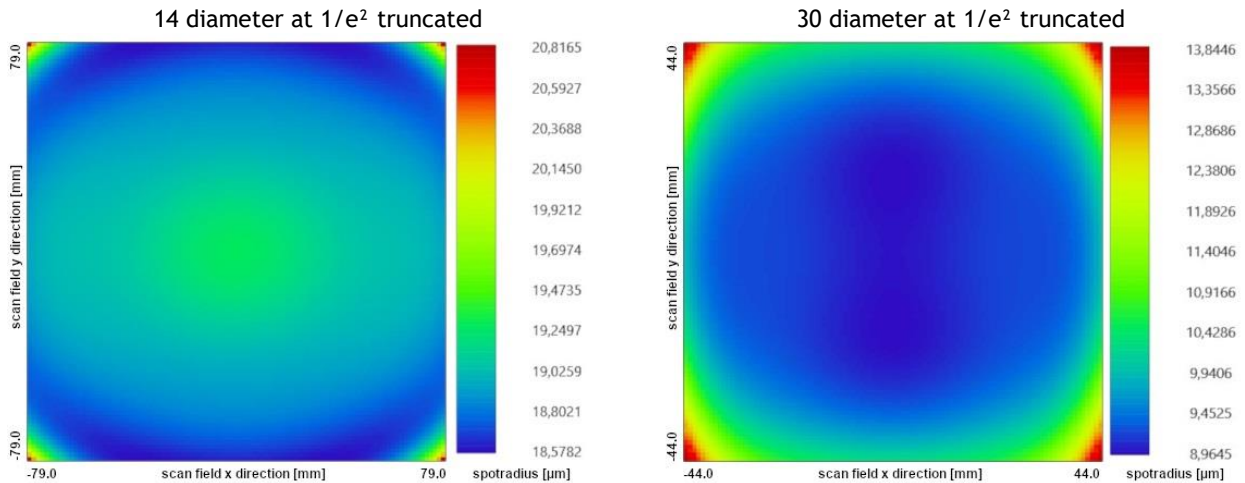
Mechanical drawing



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.