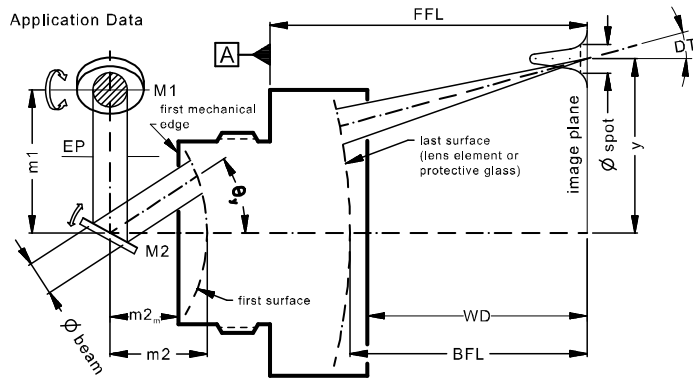


LINOS F-Theta-Ronar Lens

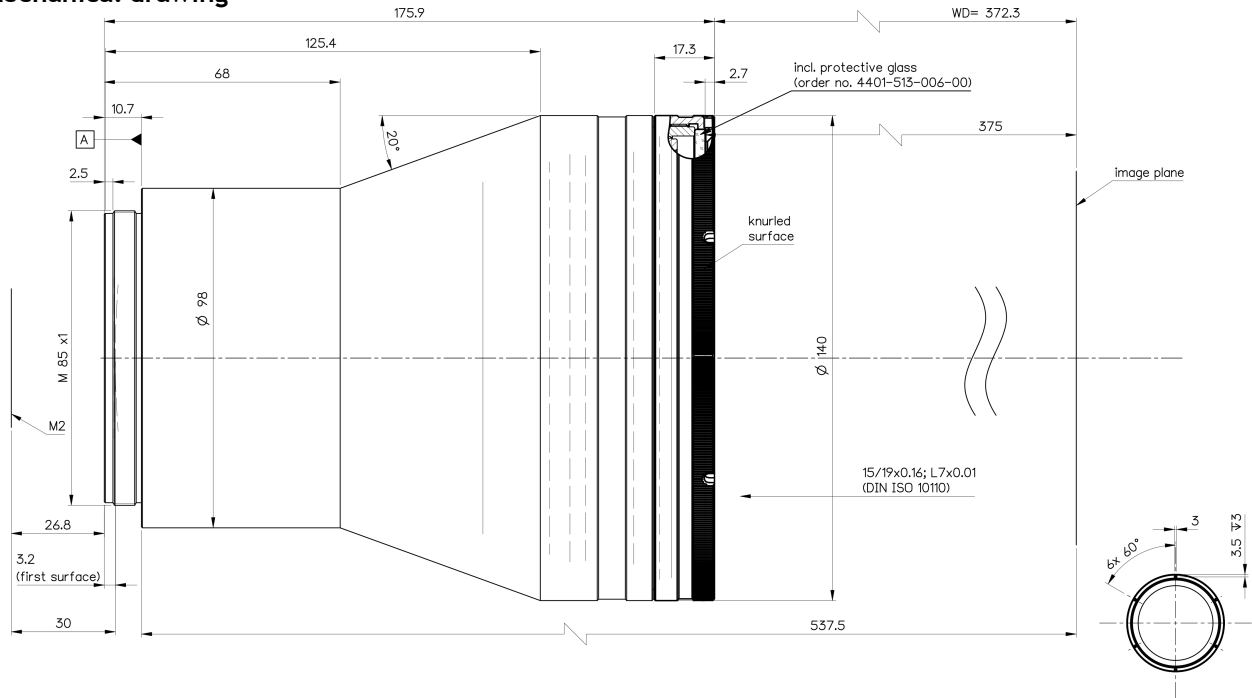
$f = 251\text{mm}$, 1030-1080nm, telecentric, fused silica, low absorption



Part number	4401-631-000-26				
Design wavelength	λ	(nm)	1064		
Effective focal length	EFL	(mm)	250.8		
Back focal length	BFL	(mm)	375.1		
Working distance	WD	(mm)	372.4		
Flange focal length	FFL	(mm)	537.6		
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	25.0
Recommended mirror distance m2	m2	(mm)	30.0	30.0	30.0
Recommended mirror distance $m2_{\text{mechanical}}$	$m2_m$	(mm)	26.8	26.8	26.8
Scan angle	$\pm\theta_{x,y}$	($^\circ$)	8.8	8.5	7.2
Scan area (edge length of scan field)	$2x * 2y$	(mm^2)	76 x 76	73 x 73	63 x 63
Spot diameter	$\varnothing_{\text{spot}}$	(μm)	35	33	25
Telecentric error (maximum deviation)	DT	($^\circ$)	0.9	0.9	0.6
Total transmission @ 1030 - 1080nm	T	(%)	> 96		
Group delay dispersion at λ	GDD	(fs^2)	1288		
LIDT coating @ 1064nm, 12ns, 100Hz		(J/cm^2)	40		
LIDT coating @ 1030nm, 291fs, 50kHz		(J/cm^2)	0.9		
Focused back reflex positions from first surface		(mm)	no external back reflection		
Weight		(g)	3210		
Protective glass	PG		4401-513-006-00		

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

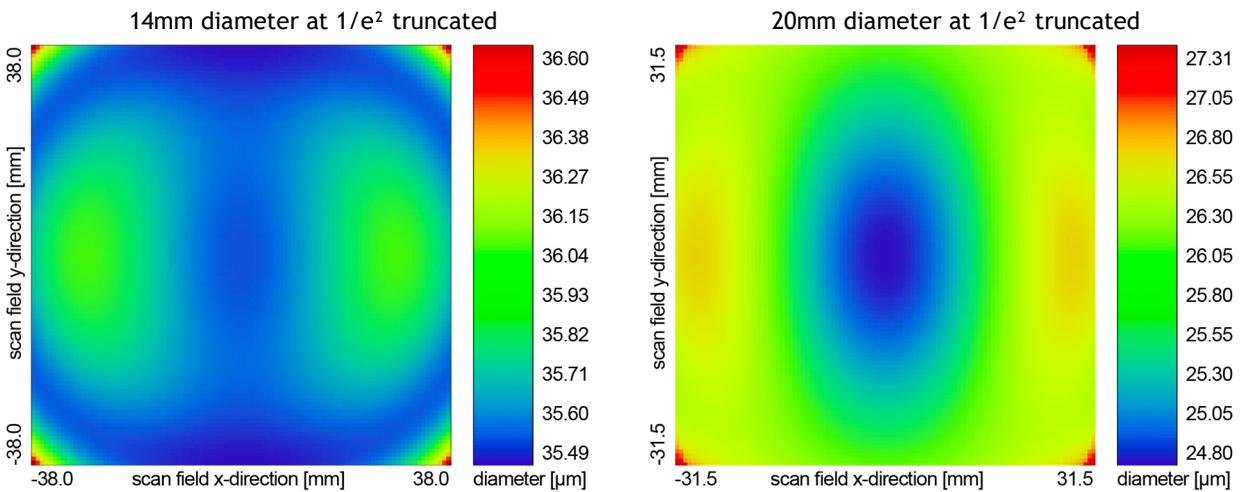
Mechanical drawing



Dimensions without tolerances are nominal values and 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.