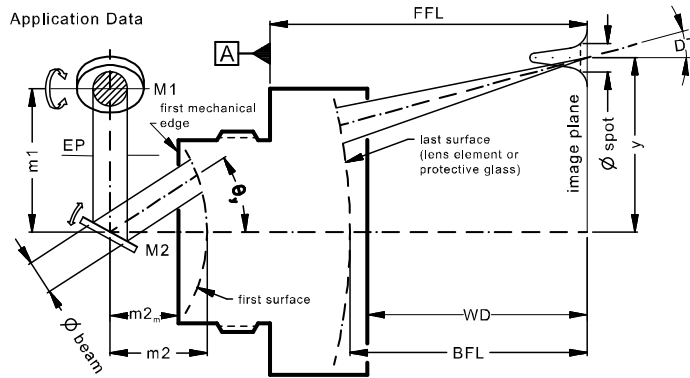


LINOS F-Theta-Ronar Lens

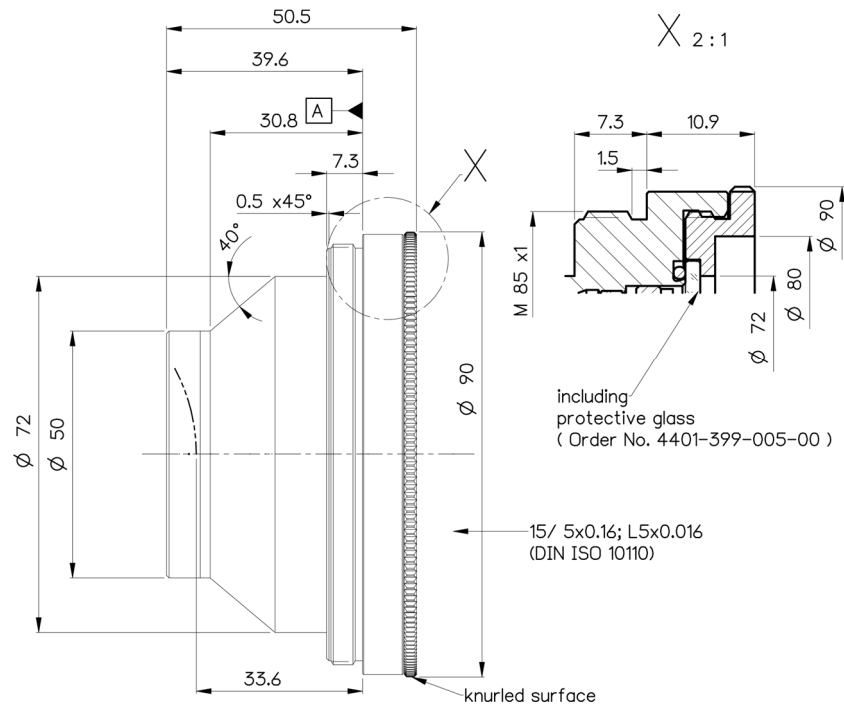
f = 160mm, 340-360nm, fused silica



Part number	4401-399-000-21		
Design wavelength	λ	(nm)	355
Effective focal length	EFL	(mm)	161
Back focal length	BFL	(mm)	202.9
Working distance	WD	(mm)	197.4
Flange focal length	FFL	(mm)	208.3
Beam diameter 1/e ² truncated	$\varnothing_{\text{beam}}$	(mm)	7.0
Recommended mirror distance m1	m1	(mm)	9.3
Recommended mirror distance m2	m2	(mm)	16.0
Recommended mirror distance m2 _{mechanical}	m2 _m	(mm)	10.0
Scan angle	$\pm\theta$	(°)	17.7
Scan area (edge length of scan field)	2x * 2y	(mm ²)	98 x 98
Spot diameter	$\varnothing_{\text{spot}}$	(μm)	15
Telecentric error (maximum deviation)	DT	(°)	12.7
Total transmission @ 340 - 360nm	T	(%)	> 96
Group delay dispersion at λ	GDD	(fs ²)	3755
LIDT coating @ 355nm, 6ns, 100Hz		(J/cm ²)	4
LIDT coating @ 343nm, 200fs, 1kHz		(J/cm ²)	0.4
Focused back reflex positions from first surface		(mm)	18.3; 21.2; 43.3; 43.6; 45.9
Weight		(g)	321
Protective glass	PG		4401-399-005-00

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

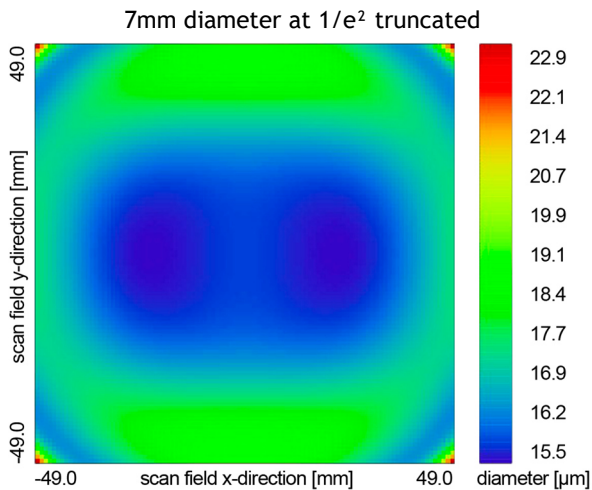
Mechanical drawing



Dimensions without tolerances are nominal values and illustration not to scale

Spot variation over 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.