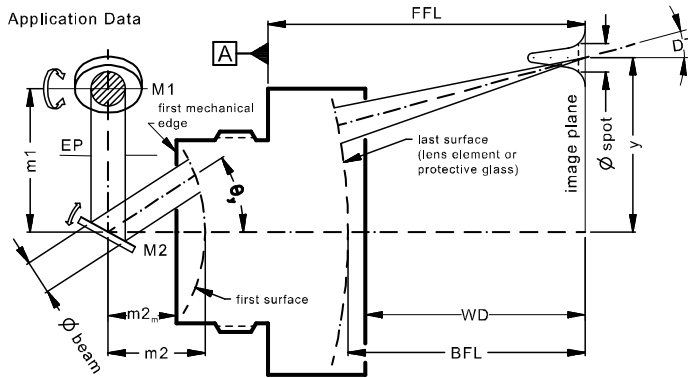


LINOS F-Theta-Ronar Lens

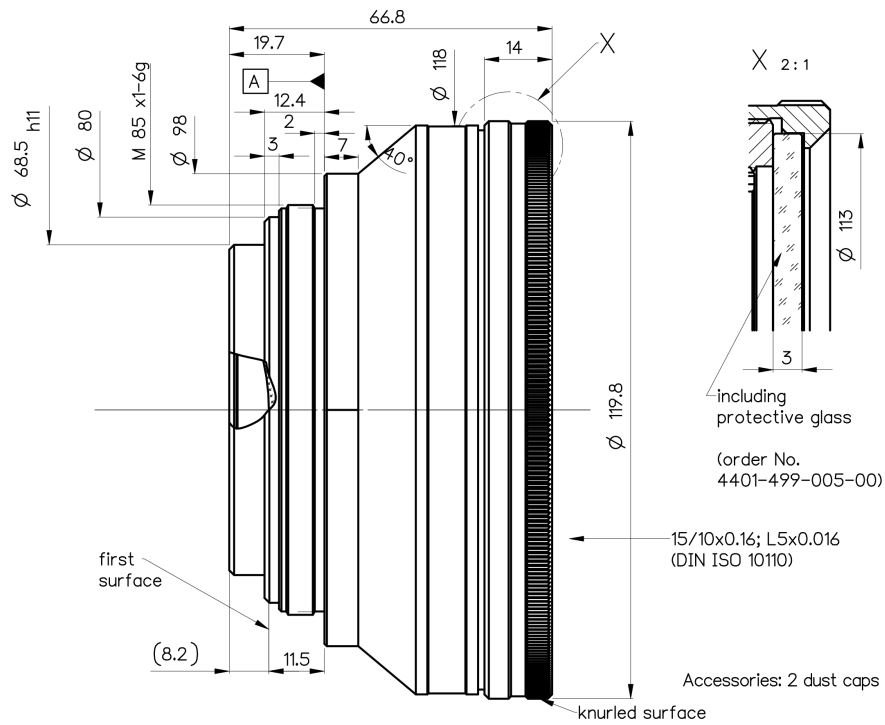
$f = 255\text{mm}$, 1030-1080nm, fused silica, low absorption



Part number	4401-499-000-26		
Design wavelength	λ	(nm)	1064
Effective focal length	EFL	(mm)	255.0
Back focal length	BFL	(mm)	320.0
Working distance	WD	(mm)	317.4
Flange focal length	FFL	(mm)	364.2
Beam diameter 1/e ² truncated	$\varnothing_{\text{beam}}$	(mm)	10.0
Recommended mirror distance m1	m1	(mm)	13.0
Recommended mirror distance m2	m2	(mm)	25.0
Recommended mirror distance m2 _{mechanical}	m2 _m	(mm)	16.8
Scan angle	$\pm\theta$	(°)	21.2
Scan area (edge length of scan field)	2x * 2y	(mm ²)	187 x 187
Spot diameter	$\varnothing_{\text{spot}}$	(μm)	50
Telecentric error (maximum deviation)	DT	(°)	15.5
Total transmission @ 1030 - 1080nm	T	(%)	> 96
Group delay dispersion at λ	GDD	(fs ²)	831
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)	3.0; 5.8; 22.9; 43.9; 72.5; 73.1
Weight		(g)	990
Protective glass	PG		4401-499-005-00

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

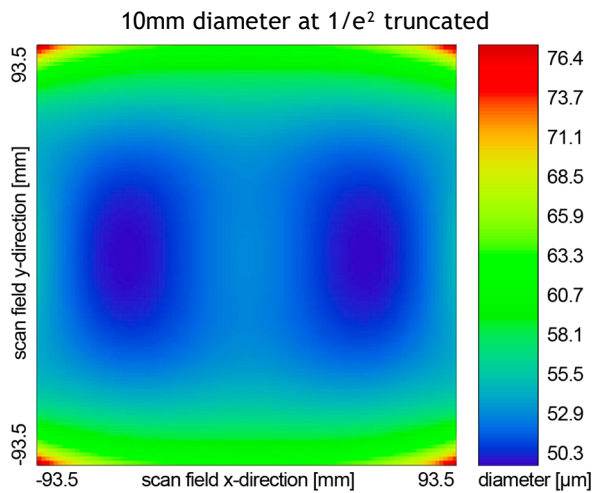
Mechanical drawing



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.