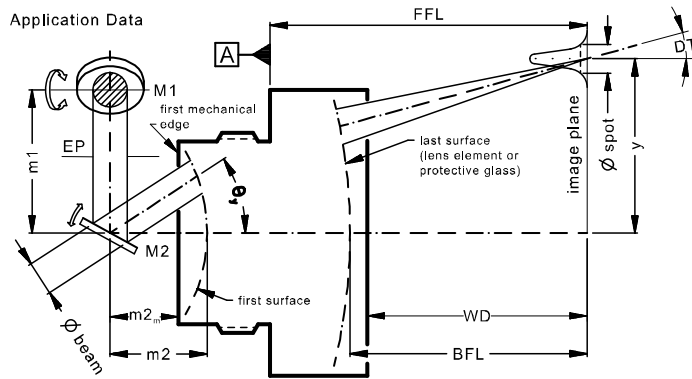


LINOS F-Theta-Ronar Lens

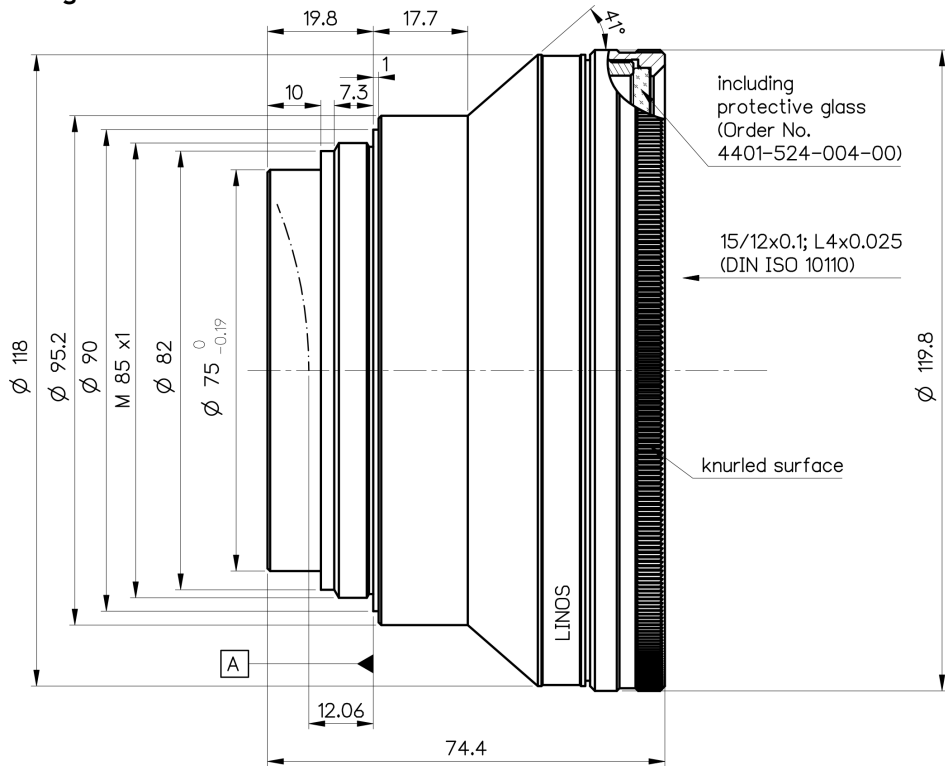
f = 420mm, 940-980nm



Part number	4401-525-000-21		
Design wavelength	λ	(nm)	980
Effective focal length	EFL	(mm)	418.5
Back focal length	BFL	(mm)	494.6
Working distance	WD	(mm)	491.7
Flange focal length	FFL	(mm)	546.3
Beam diameter 1/e ² truncated	$\varnothing_{\text{beam}}$	(mm)	20 30
Recommended mirror distance m1	m1	(mm)	25.6 37.0
Recommended mirror distance m2	m2	(mm)	27.5 30.0
Recommended mirror distance m2 _{mechanical}	m2 _m	(mm)	19.8 22.3
Scan angle	$\pm\theta_{x,y}$	(°)	± 17.3 ± 12.2
Scan area	2x * 2y	(mm ²)	253 x 253 178 x 178
Spot diameter	$\varnothing_{\text{spot}}$	(μm)	37 26
Telecentric error (maximum deviation)	DT	(°)	15.5 10.8
Total transmission @ 940 - 980nm	T	(%)	97
Focused back reflex positions from first surface		(mm)	1.9; 42.0; 61.1; 138.5; 139.7
Weight		(g)	1500
Protective glass	PG		4401-524-004-00

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

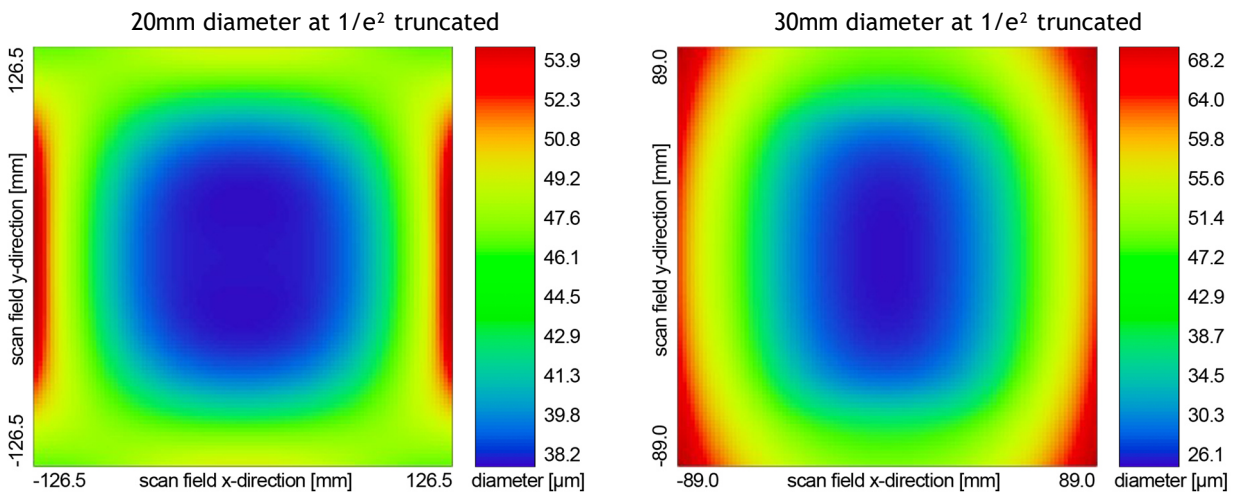
Mechanical drawing



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



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.