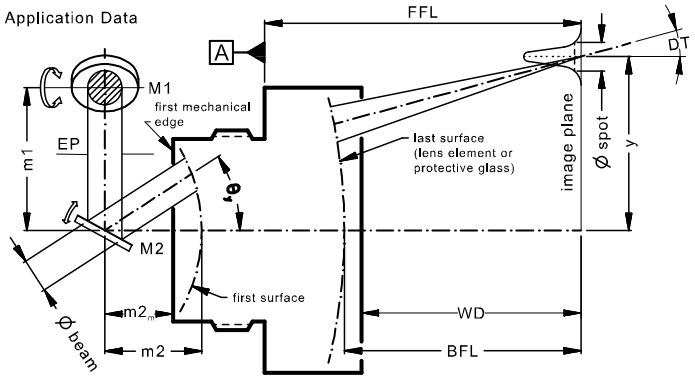
LINOS F-Theta-Ronar Lens

f = 163mm, 940-980nm



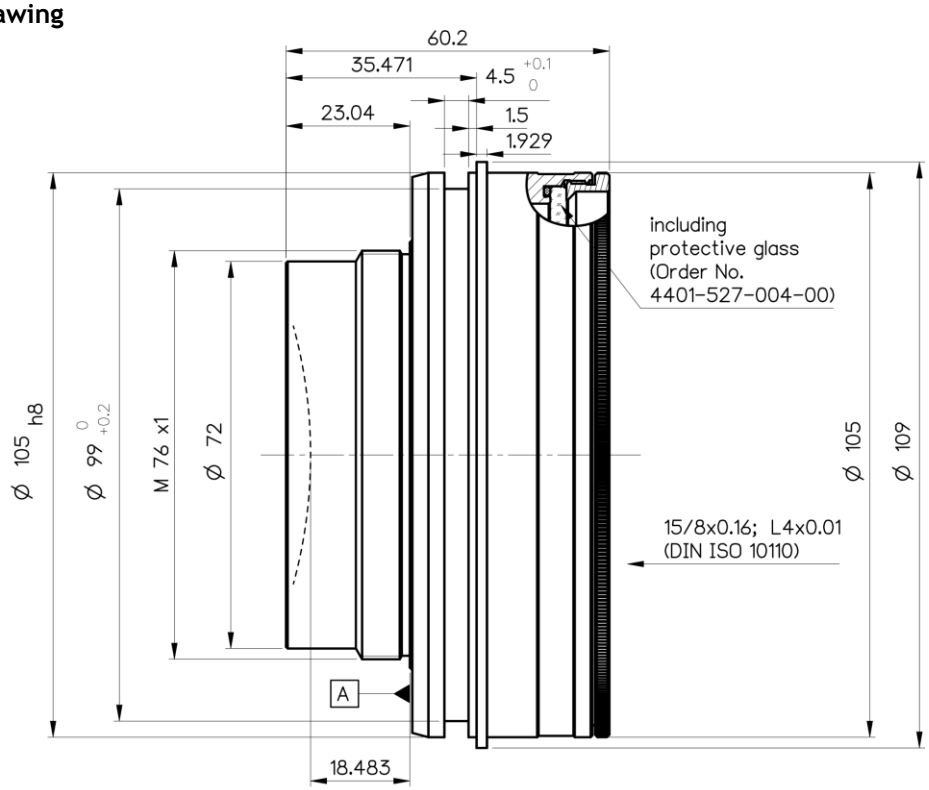
Part number	4401-527-000-21			
Design wavelength	λ	(nm)	980	
Effective focal length	EFL	(mm)	162.1	
Back focal length	BFL	(mm)	188.5	
Working distance	WD	(mm)	183.7	
Flange focal length	FFL	(mm)	217.7	
Beam diameter $1/e^2$ truncated	Øbeam	(mm)	14	20
Recommended mirror distance m1	m1	(mm)	17.0	25.6
Recommended mirror distance m2	m2	(mm)	32.5	27.5
Recommended mirror distance $m2_{mechanical}$	$m2_m$	(mm)	27.9	22.9
Scan angle	$\pm\theta_{x,y}$	(°)	±14.8	±7.8
Scan area	2x * 2y	(mm^2)	84 x 84	44 x 44
Spot diameter	Øspot	(µm)	20	15
Telecentric error (maximum deviation)	DT	(°)	8.6	4.7
Total transmission @ 940 - 980nm	T	(%)	97	
Focused back reflex positions from first surface		(mm)	6.8; 14.5; 40.4; 41.1; 45.7	
Weight		(g)	795	
Protective glass	PG		4401-527-004-00	

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

Qioptiq Photonics GmbH & Co. KG
Königsallee 23
D - 37081 Göttingen

Tel: +49 (0) 551 6935-0
lmp@excelitas.com
www.qioptiq-shop.com

Mechanical drawing

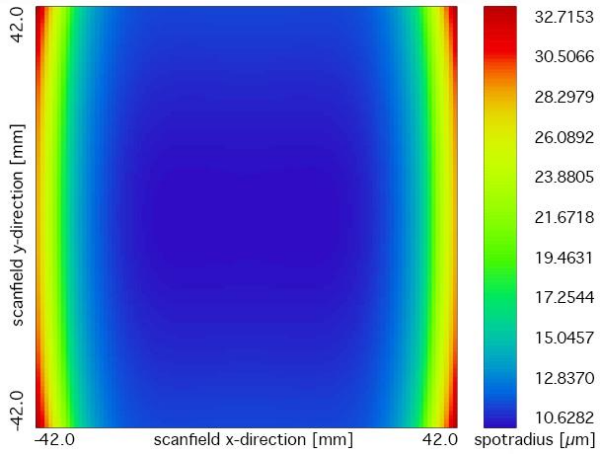


Dimensions without tolerances are nominal values and illustration not to scale

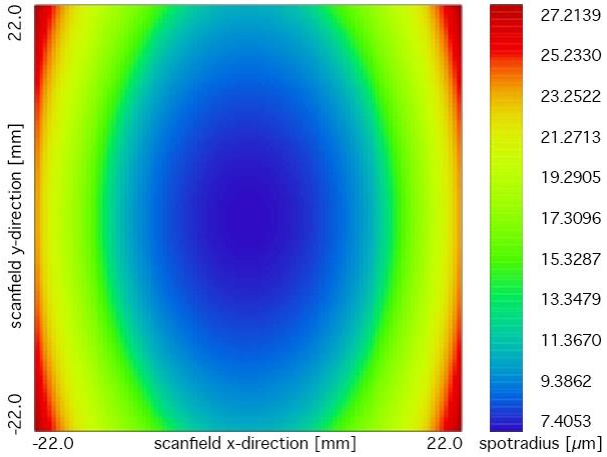
Spot variation over scanfield

Spot radius in µm at 1/e² level for a Gaussian laser beam (M^2=1)
field size and mirror distances as given above for a 2 mirror scan system

14mm diameter at 1/e² truncated



20mm diameter at 1/e² truncated



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.

Qioptiq Photonics GmbH & Co. KG
Königsallee 23
D - 37081 Göttingen

Tel: +49 (0) 551 6935-0
lmp@excelitas.com
www.qioptiq-shop.com