

LINOS F-Theta-Ronar Lenses 1030-1080 nm / 1064 nm



LINOS F-Theta-Ronar lens for 1030-1080 nm, focal length 420 mm

- Fused-silica and optical-glass designs
- Telecentric versions available
- Focal lengths ranging from 70 mm to 420 mm, tolerance $\pm 1\%$
- Screw thread M85x1, except 4401-261-000-21 M76x1 and 4401-604-000-26 M85x1/M110x1
- Low absorption coating for fused-silica lenses ≤ 20 ppm at 1064 nm
- Includes interchangeable protective glasses
- Dust-tight on the output side inclusive protective glass according to the criteria of IP6X
- Transmission $\geq 96\%$ with good performance in VIS-range
- Laser damage threshold coating for fused-silica lenses up to 40 J/cm^2 at 1064 nm, 12 ns, 100 Hz and up to 0.9 J/cm^2 at 1030 nm, 291 fs, 5 kHz
- Laser damage threshold coating for optical-glass lenses up to 10 J/cm^2 at 1064 nm, 9 ns, 100 Hz
- All lenses can be used with enlarged beam diameters and various mirror distances. Scan fields and spot size diameters will change accordingly. Please contact us to discuss your specific requirements.

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LINOS F-Theta-Ronar 1030-1080 nm, Fused-Silica, Low Absorption

Nominal focal length (mm)	Scan field (mm ²)	Max. scan angle $\pm\Theta_{x,y}$ (°)	Beam diameter truncated at $1/e^2$ (mm)	Spot diameter at $1/e^2$ (μm)	Mirror distances m1/m2 (mm)	Working distance (mm)	Protective glass	Part No.
70 telecentric	26 x 26	± 10.9	14	10	17/17	87.5	PG22	4401-551-000-26
100 telecentric	44 x 44	± 12.2	14	15	17/28	137.0	PG14	4401-561-000-26
118 telecentric	50 x 50	± 15.5	14	17	17/28	233.9	PG14	4401-607-000-26
163	85 x 85	± 15.2	14	23	17/23	219.3	PG14	4401-589-000-26
167 telecentric	84 x 84	± 14.9	20	16	26/28	215.4	PG16	4401-513-000-26
251 telecentric	63 x 63	± 14.4	20	25	25/30	372.3	PG16	4401-631-000-26
255	187 x 187	± 21.3	10	50	13/25	317.4	PG14	4401-499-000-26
270	136 x 136	± 14.8	20	27	25/32	352.0	PG16	4401-604-000-26
340	176 x 176	± 15.1	20	33	26/26	441.6	PG16	4401-546-000-26
420	254 x 254	± 17.3	20	42	26/24	510.9	PG14	4401-508-000-26

LINOS F-Theta-Ronar 1064 nm, Optical-Glass

Nominal focal length (mm)	Scan field (mm ²)	Max. scan angle $\pm\Theta_{x,y}$ (°)	Beam diameter truncated at $1/e^2$ (mm)	Spot diameter at $1/e^2$ (μm)	Mirror distances m1/m2 (mm)	Working distance (mm)	Protective glass	Part No.
100	62 x 62	± 17.7	12	16	16/12	97.7	PG2	4401-302-000-21
100 telecentric*	57 x 57	± 17.0	14	14	17/29	126.0	PG6	4401-464-000-21
160	99 x 99	± 17.7	12	26	16/12	176.2	PG2	4401-301-000-21
163	115 x 115	± 20.2	10	32	13/24	185.9	PG5	4401-261-000-21
254	157 x 157	± 17.7	20	25	26/23	296.2	PG6	4401-288-000-20
330	217 x 217	± 18.7	16	40	18/24	387.6	PG6	4401-360-000-21
420	291 x 291	± 19.8	15	55	30/16	494.2	PG6	4401-350-000-21

* Entrance lens made of fused-silica