

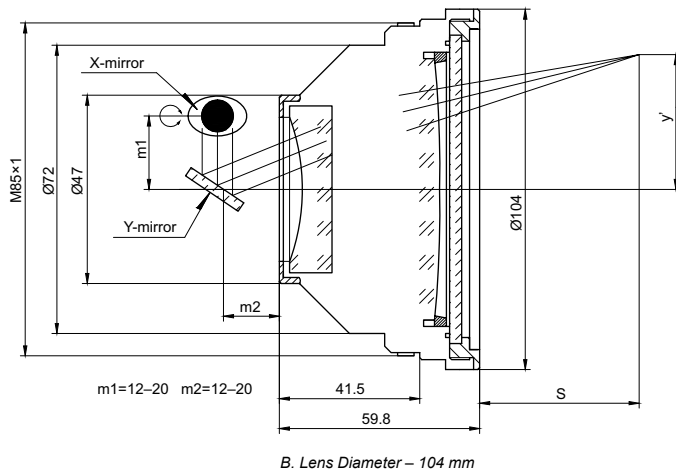
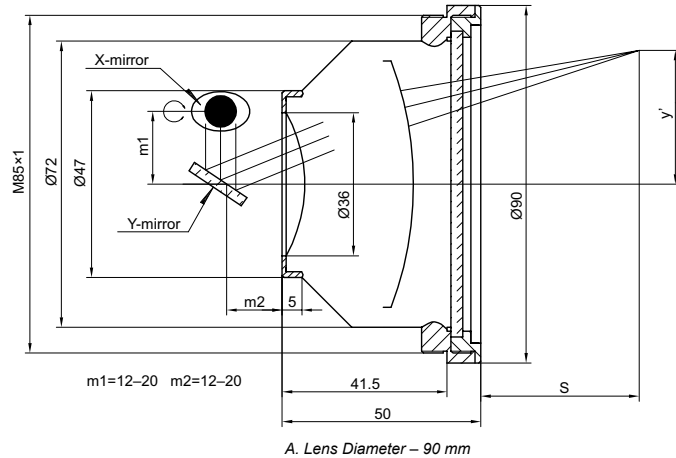
F-THETA LENS



The F-Theta Lens is designed to provide a flat field on the image plane for scanning and engraving applications where a high power laser and set of rotating mirrors are used to scan across a given field.

SPECIFICATIONS

Screw Size	M85×1
Best mirror places m1/m2	16/16 mm



Wavelength – 1064 nm, Lens Diameter – 90 mm

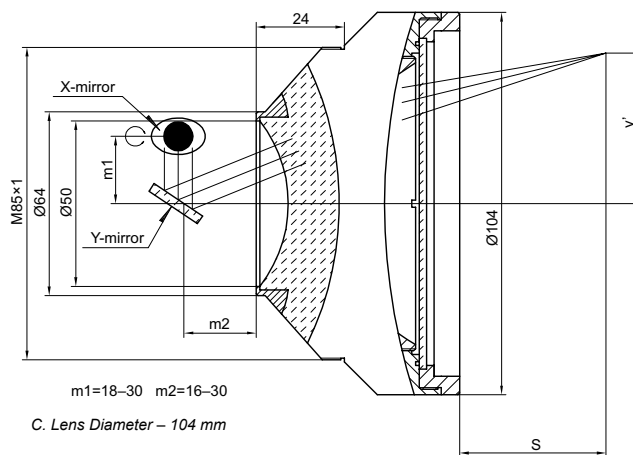
Catalogue number	Focus length, mm	Working distance S, mm	Max. scan area, mm ²	Max. scan angle, θ max	Input beam diameter, mm	Spot size, μ m	Drawing	Price, EUR
150-1001	100	115	70×70	$\pm 28^\circ$	12	16	A	420
150-1601	160	176	110×110	$\pm 28^\circ$	12	26	A	420
150-2101	210	230	145×145	$\pm 28^\circ$	12	34	A	420
150-2541	254	284	175×175	$\pm 28^\circ$	16	31	A	420
150-2901	290	324	200×200	$\pm 28^\circ$	16	31	A	420
150-3301	330	346	220×220	$\pm 28^\circ$	16	40	A	420
150-4201	420	467	300×300	$\pm 28^\circ$	16	50	A	420

Wavelength – 532 nm, Lens Diameter – 90 mm

Catalogue number	Focus length, mm	Working distance S, mm	Max. scan area, mm ²	Max. scan angle, θ max	Input beam diameter, mm	Spot size, μ m	Drawing	Price, EUR
150-1002	100	115	70×70	$\pm 28^\circ$	12	10	A	460
150-1602	160	186	110×110	$\pm 28^\circ$	12	16	A	460

Wavelength – 355 nm

Catalogue number	Focus length, mm	Working distance S, mm	Max. scan area, mm ²	Max. scan angle, θ max	Input beam diameter, mm	Spot size, μ m	Drawing	Price, EUR
150-1003	100	136	70×70	$\pm 28^\circ$	7	10	B	930
150-1603	160	199	110×110	$\pm 28^\circ$	7	15	A	930



SPECIFICATIONS

Screw Size	M85×1
Best mirror places m1/m2	24/24 mm

Wavelength – 1064 nm, Lens Diameter – 104 mm

Catalogue number	Focus length, mm	Working distance S, mm	Max. scan area, mm ²	Max. scan angle, θ max	Input beam diameter, mm	Spot size, μm	Drawing	Price, EUR
151-1631	163	185	110×110	±28°	20	17	C	520
151-2101	210	255	150×150	±28°	20	24	C	520
151-2541	254	285	175×175	±28°	20	31	C	520
151-4201	420	467	300×300	±28°	20	55	C	520
151-6501	650	697	400×400	±25°	20	85	C	520

COMPACT BEAM EXPANDER



Expansion ratio - 2X, 2.5X, 3X, 4X, 5X, 6X, 8X

A laser beam expander is designed to increase the diameter of a collimated input beam to a larger collimated output beam. EKSMA OPTICS offers compact Galilean type beam expanders for 1064 nm, 532 nm and 355 nm wavelengths. Compact beam expander has the possibility to be adjusted for the input beam divergence angle to obtain collimated, divergent or focused beam at the output.

SPECIFICATIONS

Lens material	AR coated Fused Silica Lenses
Screw Size	M22×0.75

RELATED PRODUCT

Large Rod Small Mounting Clamp (aluminium)
810-0062A

See page 8.20



Catalogue number	Wavelength, nm	Expansion ratio	Beam expander size L, mm	Transmission, %	Price, EUR
160-0021	1064	2X	51	>96	235
160-0251	1064	2.5X	51	>96	235
160-0031	1064	3X	68	>96	235
160-0041	1064	4X	75	>96	235
160-0051	1064	5X	73	>96	235
160-0061	1064	6X	75	>96	235
160-0081	1064	8X	77	>96	235
160-0101	1064	10X	70	>96	235
160-0022	532	2X	51	>96	235
160-0252	532	2.5X	51	>96	235
160-0032	532	3X	68	>96	235
160-0042	532	4X	75	>96	235
160-0052	532	5X	73	>96	235
160-0062	532	6X	75	>96	235
160-0082	532	8X	77	>96	235
160-0102	532	10X	70	>96	235
160-0043	355	4X	75	>96	250
160-0063	355	6X	75	>96	250
160-0083	355	8X	68	>96	250
160-0103	355	10X	71	>96	250

Compact beam expanders of other expansion ratio are available upon request.