Optical glass F-theta Field Lens Laser Lens

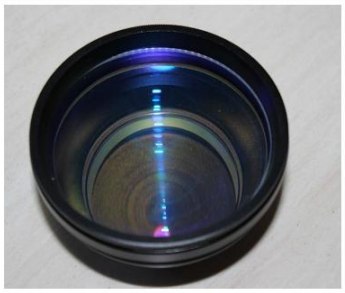
Riselaser

Product description

F-Theta lens, also known as scanning lens, is used to form a uniform laser beam spot in a certain marking area. It is one of the most important accessories of laser marking machine.

The main indicators of the scanning lens are the scanning range and focal length. Generally, the longer the focal length, the larger the scanning field and the larger the diameter of the focal spot. This means that when the scanning area is large to a certain extent, the spot is not fine enough, and the laser power density will be insufficient.

Distortion is less than 0.20%



Larger scanning angle

Various models to choose from

Application

Fiber laser machine;

YAG laser machine;

NOTICE: Please refer to the following parameter table to ensure that it matches your laser machine.

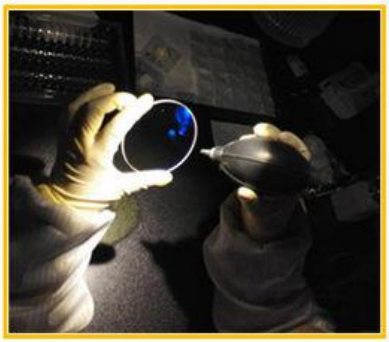
Parameters

Item Model	EFL(mm)	Work Distance(mm)	ΦIn Light(mm)	Scan Angle	Scan Field(mm)	Φ Spot Size(μm)	Lens diameter（mm）	Thread(mm)
f-63-1064	63	61.80	12	±22°	ϕ50(35×35)	10	90	M85×1
f-80-10LNS-1064	80	83.27	10	±22°	ϕ70 (50×50)	15	90	M85×1
f-80-20LNS-1064	80	77.85	20	±25°	ϕ70 (50×50)	7.7	105	M85×1
f-100M-1064	100	113.85	8	±28°	ϕ100(70×70)	24.3	60	M85×1
f-100-10LNS-1064	100	118.49	12	±28°	ϕ100(70×70)	16.2	90	M85×1
f-100R-1064	100	105.75	12	±28°	ϕ100(70×70)	16	90	M85×1
f-100-20-1064	100	104.85	20	±22°	ϕ100 (70×70)	9.76	105	M85×1
f-100D-1064	100	103.37	20	±25°	ϕ87 (62×62)	9.8	105	M85×1
f-120-30-1064	120	127.60	30	±25°	ϕ105 (80×74)	15	140	M112×1；M102×1；M95×1
f-130-1064	130	141.96	12	±25°	ϕ120 (85×85)	21.1	90	M85×1
f-160M-1064	160	178.66	8	±17.7°	ϕ100 (71×71)	38.85	47	M39×1；M55×1
f-160-12LNS-1064	160	181.29	12	±28°	ϕ155(110×110)	25.9	90	M85×1
f-160R-1064	160	176.26	12	±28°	ϕ155(110×110)	25.9	90	M85×1
f-160H-20LNS-1064	160	180.72	20	±28°	ϕ142 (101×101)	15.86	120	M85×1
f-163B-1064	163	186.45	12	±28°	ϕ162 (113.3×113.3)	26.6	90	M85×1
f-163R-1064	163	181.86	10	±31.7°	ϕ169 (120×120)	31.7	90	M85×1
f-163C-1064	163	182.15	20	±28°	ϕ160 (113×113)	15.9	115	M85×1
f-168-36-1064	168	181.12	36	±25°	ϕ146 (99.5×99.5)	9.1	163	M112×1
f-170-30-1064	170	198.31	30	±25°	ϕ150 (110×110)	11.03	140	M112×1；M102×1；M95×1
f-173B-1064	173	197.51	12	±28°	ϕ170 (120×120)	28	90	M85×1
f-188-1064	188	212.00	12	±28°	ϕ185 (130×130)	30	90	M85×1
f-210A-1064	210	231.88	12	±28°	ϕ212 (150×150)	34	90	M85×1
f-210B-1064	210	225.80	12	±28°	ϕ205 (145×145)	25	90	M85×1
f-210-30-1064	210	240.42	30	±25°	ϕ185 (140×130)	13.63	140	M112×1；M102×1；M95×1
f-220-10LNS-1064	220	259.78	15	±28°	ϕ216 (153×153)	29	90	M55×1；M85×1
f-220-20LNS-1064	220	241.55	20	±28°	ϕ212 (150×150)	21.4	120	M85×1
f- 254M-1064	254	299.42	8	±28°	ϕ254 (180×180)	60	39	M39×1；M55×1
f-254B-1064	254	277.70	14	±28°	ϕ245 (175×175)	35.3	90	M85×1
f-254-10LNS-1064	254	281.14	16	±28°	ϕ245 (175×175)	30	105	M85×1
f-254-20LNS-1064	254	271.94	20	±25°	ϕ245 (175×175)	24.8	120	M85×1
f-254-30-1064	254	284.58	30	±25°	ϕ222 (175×155)	20	140	M112×1；M102×1；M95×1
f-255-8.5B-1064	255	292.94	15	±30.2°	ϕ268 (190×190)	33.1	99.5	M85×1
f-260-1004	260	287.54	12	±28°	ϕ255 (180×180)	42.5	90	M85×1
f-290-1004	290	348.52	12	±28°	ϕ283 (210×210)	47	90	M85×1
f-300D-1064	300	360.86	10-14	±28°	ϕ295 (208×208)	35	90	M85×1
f-330-1064	330	383.93	12	±28°	ϕ325 (230×230)	53	90	M85×1
f-330C-1004	330	387.61	16	±28°	ϕ325 (230×230)	40	120	M85×1
f-330-30-1064	330	376.42	30	±28°	ϕ325 (230×230)	21.2	140	M112×1；M102×1；M95×1
f-350C-1064	350	417.81	20	±28°	ϕ345 (244×244)	34	120	M85×1
f-420-10LNS-1064	420	481.32	10	±28°	ϕ419(296×296)	82	90	M85×1
f-420B-1064	420	486.08	20	±28°	ϕ410 (290×290)	40.8	120	M85×1
f-420-30-1064	420	491.03	30	±28°	ϕ410 (290×290)	27.3	140	M112×1；M132×1
f-430B-1064	430	497.77	20	±28°	ϕ425 (300×300)	41.9	120	M85×1
f-515-1064	515	570.35	20	±31.5°	ϕ565 (400×400)	50.1	120	M85×1
f-525-1064	525	604.73	20	±31.5°	ϕ568 (402×402)	51.1	125	M85×1
f-580-1064	580	670.19	24	±28°	ϕ566 (400×400)	47	125	M85×1
f-815-1064	815	899.83	24	±28°	ϕ800 (565×565)	66	125	M85×1

Lens cleaning

1.For light pollution (dust, fiber particles) were flexible cleaning.

Using a blowing balloon, Blow off scattered contaminants on the surface of the optical element.



2.For light pollution (stains, fingerprints) were flexible cleaning.

Propanol, acetone glue with a cotton swab or alcohol to gently wipe the surface.