Suzhou Huaying Photoelectric Instrument Co., Ltd.

Address : Ace-Park No3 Building, ZhangQing Road No1 Luzhi Town , Wuzhong district, Suzhou
www.szhuayinglaser.com
Tel(86)512-68658449
Tel(86)13013816446(Ms. Zhu) Tel(86)18362797704(Ms. Liang) Tel(86)13915437341(Mr. Zhang)
Fax: 86-512-68658449
Email : hylaser@szhuayinglaser.com

华英光电
HY Laser

Professional optics manufacture in China

苏州华英光电仪器有限公司
Suzhou Huaying Photoelectric Instrument Co., Ltd.

Catalog

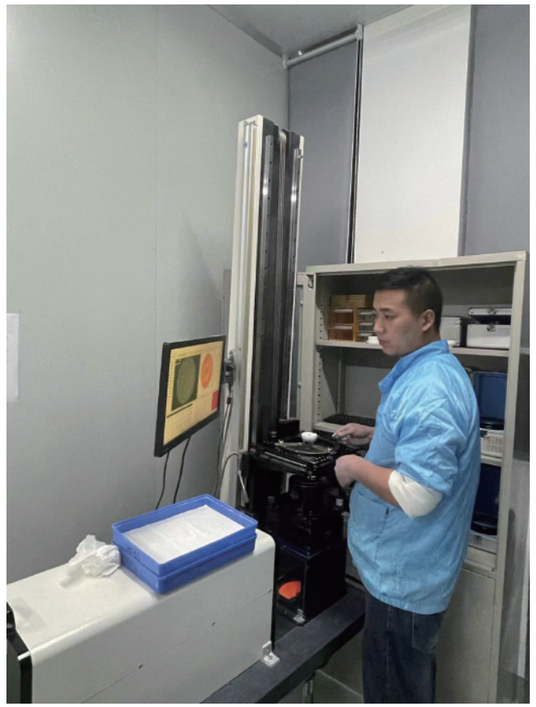
Suzhou Huaying Photoelectric Instrument Co., Ltd.was founded in 2007, which is an excellent photonic manufacturer in China. The production headquarters and R&D center are located in Luzhi Town, a famous ancient town near Shanghai. In order to keep up with the development of South China market, Shenzhen office was established. ISO9001 quality management system and intellectual property management system have aslo been conducted.

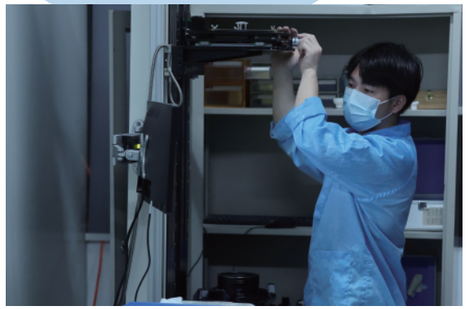
ENTERPRISE BRIEF INTRODUCTION

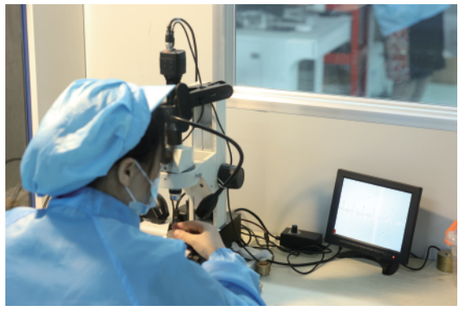
We has been devoted to optical product research and development, optical electromechanical design, optical electromechanical production, testing , assembly, product sales. Our products are mainly used in laser marking, welding, cutting, cleaning, scribing, beauty, testing and other fields where laser lenses and other types of lenses are used.

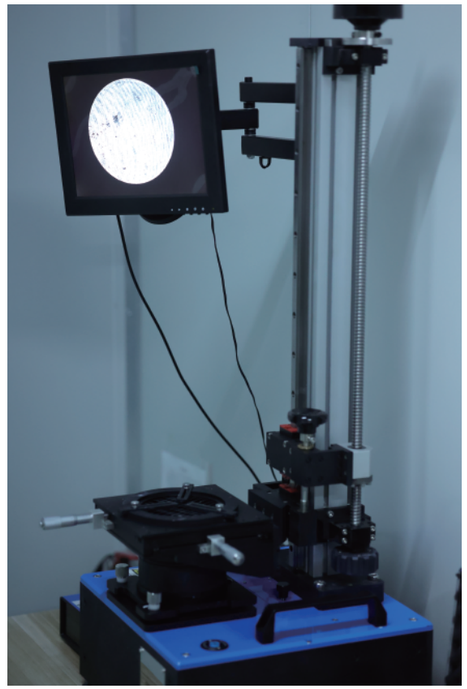
Our management idea is: to produce the high-quality, cost-effective optical components which can most meet customer needs .We will provide our customer with fast response and good service. We are committed to becoming the most reputable optical component manufacturer in China and even the world!

We have a professional team with more than ten years of professional laser design, production, sales, after-sales service experience. We can customize various specifications of lenses according to customer needs. We are committed to providing customers with first-class optical products and services.









Our equipments

High power Water-cooling F-Theta Lens series

■ Product introduction

20mm spot | 25mm spot | 30mm spot

- Imported all quartz material, high damage threshold coating, the overall transmittance is greater than 98.5%.

■ Application industry

- Cleaning application/photovoltaic industry/3D technology printing industry

■Product parameters

1064nm F-Theta (ED=12mm) quartz water cooling

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2 (mm)	Mounting Thread
HY-SL-1064-50-63	63	83	50*50	±28°	12	13	16/16	M85*1/M79*1
HY-SL-1064-70-100	100	136	70*70	±28°	12	16	16/16	M85*1/M79*1
HY-SL-1064-110-160	160	214	110*110	±28°	12	26	16/16	M85*1/M79*1
HY-SL-1064-140-210	210	273	140*140	±28°	12	24	16/16	M85*1/M79*1
HY-SL-1064-175-254	254	325	175*175	±28°	12	41	16/16	M85*1/M79*1
HY-SL-1064-220-330	330	401	230*230	±28°	12	40	16/16	M85*1/M79*1
HY-SL-1064-250-380	380	483	300*300	±28°	12	56	16/16	M85*1/M79*1
HY-SL-1064-300-420	420	483	300*300	±28°	12	56	16/16	M85*1/M79*1

1064nm F-Theta (ED=20mm) quartz water cooling

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2 (mm)	Mounting Thread
HY-SL-1064-110-170 (20mmCA)	170	208	110*110	±28°	20	17	18/24	M85*1/M79*1
HY-SL-1064-150-210(20mmCA)	210	271	150*150	±28°	20	24	18/24	M85*1/M79*1
HY-SL-1064-175-254 (20mmCA)	254	318	175*175	±28°	20	31	18/24	M85*1/M79*1
HY-SL-1064-220-330(20mmCA)	330	397	220*220	±28°	20	40	18/24	M85*1/M79*1
HY-SL-1064-300-420 (20mmCA)	420	480	300*300	±28°	20	55	18/24	M85*1/M79*1
HY-SL-1064-360-500(20mmCA)	500	560	360*360	±28°	20	66	18/24	M85*1/M79*1
HY-SL-1064-450-670 (20mmCA)	670	736	450*450	±28°	20	80	18/24	M85*1/M79*1
HY-SL-1064-600-900 (20mmCA)	900	988	600*600	±28°	20	100	18/24	M85*1/M79*1
HY-SL-1064-1350-1900 (20mmCA)	1900	2021	1350*1350	±28°	20	171	18/24	M85*1/M79*1

1064nm F-Theta (ED=30mm) quartz water cooling

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2 (mm)	Mounting Thread
HY-SL-1064-100-170 (30mmCA)-Fused Silica A	170	224	100*100	±25°	30	11	26/30	M85*1/M79*1/M102*1/M112*1
HY-SL-1064-140-210(30mmCA)-Fused Silica A	210	281	140*140	±25°	30	14	26/30	M85*1/M79*1/M102*1/M112*1
HY-SL-1064-175-254(30mmCA)-Fused Silica A	254	335	175*175	±25°	30	17	26/30	M85*1/M79*1/M102*1/M112*1
HY-SL-1064-220-330(30mmCA)-Fused Silica A	330	397	220*220	±25°	30	25	26/30	M85*1/M79*1/M102*1/M112*1
HY-SL-1064-300-420 (30mmCA)-Fused Silica A	420	497	300*300	±25°	30	33	26/30	M85*1/M79*1/M102*1/M112*1
HY-SL-1064-290-500 (30mmCA)-Fused Silica A	500	605	290*290	±25°	30	42	26/30	M85*1/M95*1/M102*1/M112*1
HY-SL-1064-415-670 (30mmCA)-Fused Silica A	670	776	415*415	±25°	30	51	26/30	M85*1/M95*1/M102*1/M112*1

F-theta Lens -fused silica series

■ Product introduction

355nm

532nm

1064nm

10mm incident spot

20mm incident spot

- Imported all quartz material, high damage threshold coating, the overall transmittance is greater than 98.5%.

■Application industry

- Cleaning application/photovoltaic industry/3D technology printing industry

■ Product parameters

1064nm F-Theta (ED=12mm) quartz

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-SL-1064-50-63	63	83	50*50	±28°	12	13	16/16	M85*1/M79*1
HY-SL-1064-70-100	100	136	70*70	±28°	12	16	16/16	M85*1/M79*1
HY-SL-1064-110-160	160	214	110*110	±28°	12	26	16/16	M85*1/M79*1
HY-SL-1064-140-210	210	273	140*140	±28°	12	24	16/16	M85*1/M79*1
HY-SL-1064-175-254	254	325	175*175	±28°	12	41	16/16	M85*1/M79*1
HY-SL-1064-220-330	330	401	230*230	±28°	12	40	16/16	M85*1/M79*1
HY-SL-1064-250-380	380	483	300*300	±28°	12	56	16/16	M85*1/M79*1
HY-SL-1064-300-420	420	483	300*300	±28°	12	56	16/16	M85*1/M79*1

1064nm F-Theta (ED=20mm) quartz

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-SL-1064-110-170 (20mmCA)	170	208	110*110	±28°	20	17	18/24	M85*1/M79*1
HY-SL-1064-150-210(20mmCA)	210	271	150*150	±28°	20	24	18/24	M85*1/M79*1
HY-SL-1064-175-254 (20mmCA)	254	318	175*175	±28°	20	31	18/24	M85*1/M79*1
HY-SL-1064-220-330(20mmCA)	330	397	220*220	±28°	20	40	18/24	M85*1/M79*1
HY-SL-1064-300-420 (20mmCA)	420	480	300*300	±28°	20	55	18/24	M85*1/M79*1
HY-SL-1064-360-500(20mmCA)	500	560	360*360	±28°	20	66	18/24	M85*1/M79*1
HY-SL-1064-450-670 (20mmCA)	670	736	450*450	±28°	20	80	18/24	M85*1/M79*1
HY-SL-1064-600-900 (20mmCA)	900	988	600*600	±28°	20	100	18/24	M85*1/M79*1
HY-SL-1064-1350-1900 (20mmCA)	1900	2021	1350*1350	±28°	20	171	18/24	M85*1/M79*1

1064nm F-Theta (ED=30mm) quartz

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-SL-1064-100-170 (30mmCA)-Fused Silica A	170	224	100*100	±25°	30	11	26/30	M85*1/M79*1/M102*1/M112*1
HY-SL-1064-140-210(30mmCA)-Fused Silica A	210	281	140*140	±25°	30	14	26/30	M85*1/M79*1/M102*1/M112*1
HY-SL-1064-175-254(30mmCA)-Fused Silica A	254	335	175*175	±25°	30	17	26/30	M85*1/M79*1/M102*1/M112*1
HY-SL-1064-220-330(30mmCA)-Fused Silica A	330	397	220*220	±25°	30	25	26/30	M85*1/M79*1/M102*1/M112*1
HY-SL-1064-300-420 (30mmCA)-Fused Silica A	420	497	300*300	±25°	30	33	26/30	M85*1/M79*1/M102*1/M112*1
HY-SL-1064-290-500 (30mmCA)-Fused Silica A	500	605	290*290	±25°	30	42	26/30	M85*1/M95*1/M102*1/M112*1
HY-SL-1064-415-670 (30mmCA)-Fused Silica A	670	776	415*415	±25°	30	51	26/30	M85*1/M95*1/M102*1/M112*1

Telecentric F-Theta Lens series

■ Product introduction

355nm | 532nm | 1064nm

- Telecentricity is less than 1.5 degrees, imported quartz material, and the transmissivity is greater than 98%.

■Application industry

- E-Car cutting of new energy power battery (1064nm Telecentric F-Theta Lens)
- FPC cutting, precision cutting (355nm Telecentric F-Theta Lens)
- Glass drilling, cutting (532nm / 1064nm Telecentric F-Theta Lens)

■Product parameters

355nm Telecentric F-Theta Lens

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-TSL-355-65-100(8CA)	100	124.6	50*50	±25°	8	8	13/20	M85*1/M79*1
HY-TSL-355-70-100(8CA)	110	150	65*65	±25°	8	9	13/20	M85*1/M79*1
HY-TSL-355-100-160(8CA)	160	221	70*70	±25°	8	13	13/20	M85*1/M79*1
HY-TSL-355-100-160(8CA)	160	221	100*100	±25°	8	13	13/20	M85*1/M79*1

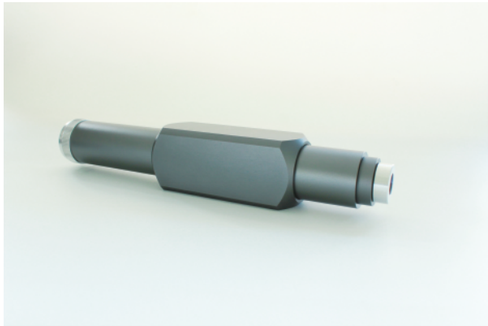
532nm Telecentric F-Theta Lens

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-TSL-532-65-100(8CA)	100	130	50*50	±25°	8	10	13/20	M85*1/M79*1
HY-TSL-532-70-110(8CA)	110	150	65*65	±25°	8	17	13/20	M85*1/M79*1
HY-TSL-532-70-160(8CA)	160	150	80*80	±25°	12	18	13/20	M85*1/M79*1

1064nm Telecentric F-Theta Lens

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-TSL-1064-65-100(12CA)	100	112	50*50	±25°	12	16	13/20	M85*1/M79*1
HY-TSL-1064-70-110(12CA)	110	140	65*65	±25°	12	18	13/20	M85*1/M79*1
HY-TSL-1064-100-160(12CA)	160	220	80*80	±25°	12	26	13/20	M85*1/M79*1
HY-TSL-1064-100-160(12CA)	160	230	100*100	±25°	12	26	13/20	M85*1/M79*1

Bessel ultra fast cutting head series



■Product introduction

1mm | 3mm | 6mm | 8mm

- High quality imported quartz material is used, and the edge collapse is less than 5um under 1000 times microscope.

■ Application industry

- OLED panel cutting, full screen mobile phone cover glass cutting, precision processing of intelligent wearable device protective glass, sapphire taper free cutting, wafer cutting, LCD panel cutting and other fields.

Manual Variable magnification beam Expander series

■Product introduction

355nm

532nm

1064nm

1-4X

2-10X

- With accurate beam expansion magnification, the optical image quality reaches the diffraction limit, the product coaxiality is controlled within 3, the single side induction rate of the piece is 99,8%, and the damage smell value can withstand 1000W fiber laser at most.

F-Theta Lens series

■Product introduction

355nm

532nm

1064nm

■Application industry

- Welding, cutting and marking

■Product parameters

1064nm F-Theta Lens

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-SL-1064-50-63(12CA)	63	78	50*50	±28°	12	12	16/16	M85*1/M79*1
HY-SL-1064-70-100(12CA)	100	114	70*70	±28°	12	16	16/16	M85*1/M79*1
HY-SL-1064-90-130(12CA)	130	144	90*90	±28°	12	21	16/16	M85*1/M79*1
HY-SL-1064-110-160(12CA)	160	176	110*110	±28°	12	26	16/16	M85*1/M79*1
HY-SL-1064-140-210(12CA)	210	232	140*140	±28°	12	34	16/16	M85*1/M79*1
HY-SL-1064-150-225(12CA)	225	250	150*150	±28°	12	34	16/16	M85*1/M79*1
HY-SL-1064-175-254(12CA)	254	287	175*175	±28°	12	31	16/16	M85*1/M79*1
HY-SL-1064-200-290(12CA)	290	324	200*200	±28°	12	31	16/16	M85*1/M79*1
HY-SL-1064-220-330(12CA)	330	355	220*220	±28°	12	40	16/16	M85*1/M79*1
HY-SL-1064-250-380(12CA)	380	414	250*250	±28°	12	46	16/16	M85*1/M79*1
HY-SL-1064-300-420(12CA)	420	465	300*300	±28°	12	50	16/16	M85*1/M79*1

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-SL-1064-70-100(20CA)	100	125	70*70	±28°	20	17	18/24	M85*1/M79*1
HY-SL-1064-110-160(20CA)	160	185	110*110	±28°	20	17	18/24	M85*1/M79*1
HY-SL-1064-150-210(20CA)	210	250	150*150	±28°	20	24	18/24	M85*1/M79*1
HY-SL-1064-175-254(20CA)	254	290	175*175	±28°	20	31	18/24	M85*1/M79*1
HY-SL-1064-220-330(20CA)	330	377	220*220	±28°	20	35	18/24	M85*1/M79*1
HY-SL-1064-250-350(20CA)	350	414	280*280	±28°	20	41	18/24	M85*1/M79*1
HY-SL-1064-300-420(20CA)	420	480	300*300	±28°	20	55	18/24	M85*1/M79*1
HY-SL-1064-360-500(20CA)	500	551	360*360	±28°	20	60	18/24	M85*1/M79*1
HY-SL-1064-380-525(20CA)	525	580	380*380	±28°	20	60	18/24	M85*1/M79*1
HY-SL-1064-400-580(20CA)	580	640	400*400	±28°	20	65	18/24	M85*1/M79*1
HY-SL-1064-450-650(20CA)	650	720	450*450	±28°	20	85	18/24	M85*1/M79*1
HY-SL-1064-560-800(20CA)	800	860	560*560	±28°	20	104	18/24	M85*1/M79*1
HY-SL-1064-600-900(20CA)	900	973	600*600	±28°	20	117	18/24	M85*1/M79*1

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-SL-1064-70-120-Fused Silica B (30CA)	120	145	70*70	±25°	30	9	26/30	M85*1/M95*1/M102*1/M112*1
HY-SL-1064-100-170 (30CA)	170	185	100*100	±25°	30	11	26/30	M85*1/M95*1/M102*1/M112*1
HY-SL-1064-140-210 (30CA)	210	312	140*140	±25°	30	15	26/30	M85*1/M95*1/M102*1/M112*1
HY-SL-1064-160-254(30CA)	254	262	160*160	±25°	30	17	26/30	M85*1/M95*1/M102*1/M112*1
HY-SL-1064-200-330(30CA)	330	373	200*200	±25°	30	25	26/30	M85*1/M95*1/M102*1/M112*1
HY-SL-1064-255-420-Fused Silica B (30CA)	420	476	255*255	±25°	30	34	26/30	M85*1/M95*1/M102*1/M112*1

■Product parameters

355nm UV F-Theta Lens

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-SL-355-15-34	34	29	15*15	±25°	12	4	16/16	M85*1/M79*1
HY-SL-355-30-50	50	45	30*30	±25°	12	5	16/16	M85*1/M79*1
HY-SL-355-50-63	63	81	50*50	±25°	12	5	16/16	M85*1/M79*1
HY-SL-355-70-100	100	136	70*70	±25°	12	6	16/16	M85*1/M79*1
HY-SL-355-100-160	160	186	110*110	±25°	12	9	16/16	M85*1/M79*1
HY-SL-355-150-210	210	243	150*150	±25°	12	12	16/16	M85*1/M79*1
HY-SL-355-175-254	254	282	175*175	±25°	12	15	16/16	M85*1/M79*1
HY-SL-355-200-290	290	322	200*200	±25°	12	16	16/16	M85*1/M79*1
HY-SL-355-220-330	330	363	230*230	±25°	12	18	16/16	M85*1/M79*1
HY-SL-355-250-380	380	421	250*250	±25°	12	20	16/16	M85*1/M79*1
HY-SL-355-300-420	420	476	300*300	±25°	12	23	16/16	M85*1/M79*1
HY-SL-355-360-510	510	585	360*360	±25°	12	42	16/16	M85*1/M79*1
HY-SL-355-450-650	650	710	450*450	±25°	12	53	16/16	M85*1/M79*1
HY-SL-355-550-750	750	833	550*550	±25°	12	74	16/16	M85*1/M79*1
HY-SL-355-600-840	840	924	600*600	±25°	12	83	16/16	M85*1/M79*1
HY-SL-355-800-1090	1090	1178	800*700	±25°	12	105	16/16	M85*1/M79*1
HY-SL-355-200-330	330	376	200*200	±25°	14	18	17/29	M85*1

532nm F-Theta Lens

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-SL-532-50-63(12CA)	63	78	50*50	±28°	12	10	16/16	M85*1/M79*1
HY-SL-532-70-100(12CA)	100	114	70*70	±28°	12	10	16/16	M85*1/M79*1
HY-SL-532-110-160(12CA)	160	180	110*110	±28°	12	16	16/16	M85*1/M79*1
HY-SL-532-150-210(12CA)	210	233	140*140	±28°	12	21	16/16	M85*1/M79*1
HY-SL-532-175-254(12CA)	254	287	175*175	±28°	12	25	16/16	M85*1/M79*1
HY-SL-532-220-330(12CA)	330	355	230*230	±28°	12	33	16/16	M85*1/M79*1
HY-5L-532-300-420(12CA)	420	465	300*300	±28°	12	36	16/16	M85*1/M79*1
HY-SL-532-350-500(12CA)	500	539	350*350	±28°	12	41	16/16	M85*1/M79*1
HY-SL-532-245-330	330	397	245*245	±28°	16	23	18/29	M85*1
HY-SL-532-330-420	420	495.6	300*300	±28°	15	27	18/29	M85*1

■Product parameters

405nm F-Theta Lens

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-SL-405-110-160(12CA)	160	181	110*110	±28°	12	26	16/16	M85*1
HY-SL-405-150-210(12CA)	210	230	140*140	±28°	12	34	16/16	M85*1
HY-SL-405-175-254(16CA)	254	284	175*175	±28°	12	31	16/16	M85*1
HY-SL-405-220-290(16CA)	290	324	200*200	±28°	12	31	16/16	M85*1

980nm F-Theta Lens

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-SL-980-70-100(12CA)	100	114.6	70*70	±28°	12	16	16/16	M85*1
HY-SL-980-110-160(12CA)	160	176	110*110	±28°	12	16	16/16	M85*1

1550nm F-Theta Lens

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-SL-1550-50-63-M39(8CA)	63	77	28*28	±18°	8	22	10/10	M39*1
HY-SL-1550-70-100-M39(8CA)	100	106	45*45	±18°	8	35	10/10	M39*1

915nm F-Theta Lens

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-SL-915-110-160(12CA)	160	176	110*110	±28°	12	26	16/16	M85*1
HY-SL-915-255-Fused Silica B(30CA)	420	476	255*255	±25°	30	34	26/30	M85*1/M95*1/M102*1/M112*1

CO2 F-Theta Lens series

■Product introduction

- The design has high machining accuracy, and all systems have reached the diffraction limit.
- F* θ Good linearity and small distortion.
- Good roundness and uniformity in the format.

■Application industry

- Various large format scanning processing systems, marking, coaling, cutting, 3D printing, cladding, etc.

■Product parameters

Product specifications	Focal Length (mm)	Diameter (mm)	Scan Field (mm)	Gaussian diffuse spot diameter (mm)	Mounting Thread (mm)
HY-SL-10.6-50-63	63	48	50*50	0.2	M85*1
HY-SL-10.6-70-100	100	48	70*70	0.2	M85*1
HY-SL-10.6-110-160	160	48	110*110	0.2	M85*1
HY-SL-10.6-150-210	210	48	150*150	0.2	M85*1
HY-SL-10.6-175-254	254	48	175*175	0.2	M85*1
HY-SL-10.6-220-330	330	48	220*220	0.2	M85*1
HY-SL-106-250-360	360	48	250*250	0.25	M85*1
HY-SL-10.6-300-420	420	48	300*300	0.35	M85*1
HY-SL-10.6-400-592	592	48	400*400	0.2	M85*1
HY-SL-106-500-692	692	48	500*500	0.65	M85*1
HY-SL-10.6-600-805	805	48	600*600	0.7	M85*1

High power cleaning F-Theta Lens series

■ Product introduction

10mm incident spot

20mm incident spot

- Imported quartz material, high damage threshold coating, the overall transmittance is greater than 99%.

■Application industry

- Laser cleaning, laser derusting

Portable laser cleaning F-theta lens have advantages on small size and light weight.It is suitable for mechanicalarm, hand-held and other conditions that require lighter lens weight.

■Product parameters

1064nm small F-Theta Lens

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-SL-1064-40-63-φ47	63	77	40*40	+18°	8	15	10/10	M39*1/M55*1
HY-SL-1064-70-100-φ47	100	114	70*70	+25°	8	24	10/10	M39*1/M55*1
HY-SL-1064-90-130-φ47	130	150	90*90	+25°	8	31	10/10	M39*1/M55*1
HY-SL-1064-100-160-φ47	160	182	100*100	+25°	8	39	10/10	M39*1/M55*1
HY-SL-1064-150-210-φ47	210	241	150*150	+25°	8	51	10/10	M39*1/M55*1
HY-SL-1064-175-254-φ47	254	283	175*175	+25°	8	62	10/10	M39*1/M55*1
HY-SL-1064-220-330-φ447	330	360	220*220	+25°	8	81	10/10	M39*1/M55*1
HY-SL-1064-350-500-φ47	600	566	350*350	+25°	8	119	10/10	M39*1/M55*1

1030nm-1090nm F-Theta Lens round full quartz

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-SL-1064-70-100-047-Fused Silica A	100	123	70*70	+27°	8	24	10/10	M39*1/M55*1
HY-SL-1064-100-160-47-Fused Silica A	160	182	105*105	+27°	8	40	10/10	M39*1/M55*1
HY-SL-1064-150-210-047-Fused Silica A	210	241	140*140	+27°	8	51	10/10	M39*1/M55*1
HY-SL-1064-175-254-047-Fused Silica A	254	287	160*160	+27°	8	64	10/10	M39*1/M55*1
HY-SL-1064-200-300-47-Fused Silica A	300	346	185*185	+27°	8	82	10/10	M39*1/M55*1
HY-SL-1064-300-420-47-Fused Silica A	420	462	300*300	+27°	8	100	10/10	M39*1/M55*1
HY-SL-1064-350-500-047-Fused Silica A	500	566	350*350	+27°	8	112	10/10	M39*1/M55*1
HY-SL-1064-680-1000-47-Fused Silica A	1000	1061	680*680	+27°	8	213	10/10	M39*1/M55*1

1030nm-1090nm F-Theta Lens square

Part Number	Focal Length (mm)	Back Working (mm)	Scan Field (mm)	Scan Angle θ max	Entrance Diameter φ(mm)	Foucs Size (μm)	Mirror Distances m1/m2(mm)	Mounting Thread
HY-SL-1064-80-100-Fused Silica A(方12mm)	100	124	80	+25°	10	24	10	fix by screw
HY-SL-1064-100-160-Fused Silica A(方12mm)	160	185	100	+25°	10	31	10	fix by screw
HY-SL-1064-150-210-Fused Silica A(方12mm)	210	241	140	+25°	10	41	10	fix by screw
HY-SL-1064-175-254-Fused Silica A(方12mm)	254	287	180	+25°	10	48	10	fix by screw
HY-SL-1064-200-290-Fused Silica A(方12mm)	330	346	200	+25°	10	55	10	fix by screw
HY-SL-1064-300-420-Fused Silica A(方12mm)	420	455	300	+25°	10	63	10	fix by screw
HY-SL-1064-100-100-Fused Silica A(方20mm)	100	133	100	+25°	20	16	20	fix by screw
HY-SL-1064-140-160-Fused Silica A(方20mm)	160	203	140	+25°	20	26	20	fix by screw
HY-SL-1064-200-210-Fused Silica A(方20mm)	210	250	200	+25°	20	30	20	fix by screw
HY-SL-1064-250-254-Fused Silica A(方20mm)	254	293	250	+25°	20	35	20	fix by screw
HY-SL-1064-120-170-Fused Silica A(方30mm)	170	224	120	+25°	30	11	30	fix by screw
HY-SL-1064-200-254-Fused Silica A(方30mm)	254	335	230	+25°	30	18	30	fix by screw
HY-SL-1064-280-330-Fused Silica A(方30mm)	330	397	280	+25°	30	25	30	fix by screw

High power Beam Expander series

■Product introduction

355nm | 532nm | 1064nm

- Imported quartz material, high damage threshold coating.

■Product parameters

Laser Beam Expander

laser beam expander is mainly used to expand the laser beam and reduce the divergence angle of laser beam, The laser quality is higher after the beam expanding system, and theprocessing spotissmaller and sharper with the focusing optical system.

355 nm Beam Expander

Fixed

Part Number	Magnification	Wavelength	Diameter of incident pupil	Exit pupil diameter	Maximum outer diameter of lens barrel	Lens length	Threaded connection mode
HY-BE355-1.2X	1.2	355nm	6	21.6	27	28.7	M22x0.75
HY-BE-355-1.5X	1.5					37.5	M22x0.75
HY-BE-355-2X	2					46.5	M22x0.75
HY-BE-3553X	3					52	M22x0.75
HY-BE-3554X	4					70.5	M22x0.75
HY-BE355-5X	5					76	M22x0.75
HY-BE-355-6X	6					62	M22x0.75
HY-BE-355-7X	7					63	M22x0.75
HY-BE-355-8X	8					64.5	M22x0.75
HY-BE-355-10X	10					66	M22x0.75
HY-BE-355-12X	12					84.5	M22x0.75
HY-BE-355-15X	15					70.5	M22x0.75
HY-BE-355-20X	20					87.2	M22x0.75

Threaded Adjustable /Flange Adjustable

Part Number	Magnification	Wavelength	Diameter of incident pupil	Exit pupil diameter	Maximum outer diameter of lens barrel	Lens length	Threaded connection mode
HY-BE-KT-355-2X	2	355nm	6	21.6	27	46.5	M22x0.75
HY-BE-KT-355-3X	3					52	M22x0.75法兰4孔4-φ4.6
HY-BE-KT-355-4X	4					70.5	M22x0.75法兰4孔4-φ4.6
HY-BE-KT-355-5X	5					76	M22x0.75法兰4孔4-φ4.6
HY-BE-KT-355-6X	6					62	M22x0.75法兰4孔4-φ4.6
HY-BE-KT-355-7X	7					63	M22x0.75法兰4孔4-φ4.6
HY-BE-KT-355-8X	8					64.5	M22x0.75法兰4孔4-φ4.6
HY-BE-KT-355-10X	10					66	M22x0.75法兰4孔4-φ4.6
HY-BE-KT-355-12X	12					84.5	M22x0.75法兰4孔4-φ4.6
HY-BE-KT-355-15X	15					70.5	M22x0.75法兰4孔4-φ4.6
HY-BE-KT-355-20X	20					87.2	M22x0.75

■Product parameters

532nm Beam expander

Part Number	Magnification	Wavelength	Diameter of incident pupil	Exit pupil diameter	Maximum outer diameter of lens barrel	Lens length	Threaded connection mode
HY-BE-532-1.5X	1.5	532nm	10.4	21.6	27	39.2	M22*0.75
HY-BE-532-2X	2					46.5	M22*0.75
HY-BE-532-3X	3					66.5	M22*0.75
HY-BE-532-4X	4					74	M22*0.75
HY-BE-532-5X	5					70.2	M22*0.75
HY-BE-532-6X	6					71.8	M22*0.75
HY-BE-532-7X	7		6			64	M22*0.75
HY-BE-532-8X	8					68	M22*0.75
HY-BE-532-10X	10					77.7	M22*0.75
HY-BE-532-12X	12					72	M22*0.75
HY-BE-532-15X	15					81.2	M22*0.75

Adjustable

Part Number	Magnification	Wavelength	Diameter of incident pupil	Exit pupil diameter	Maximum outer diameter of lens barrel	Lens length	Threaded connection mode
HY-BE-KT-532-15X	1.5	532nm	10.4	21.6	27	39.2	M22*0.75
HY-BE-KT-532-2X	2					46.5	M22*0.75
HY-BE-KT-532-3X	3					66.5	M22*0.75
HY-BE-KT-532-4X	4					74	M22*0.75
HY-BE-KT-532-5X	5					70.2	M22*0.75
HY-BE-KT-532-6X	6					71.8	M22*0.75
HY-BE-KT-532-8X	8		6			65.5	M22*0.75
HY-BE-KT-532-10X	10					68	M22*0.75
HY-BE-KT-532-12X	12					77.7	M22*0.75
HY-BE-KT-532-15X	15					72	M22*0.75
HY-BE-KT-532-20X	20					81.2	M22*0.75

10.6um Beam expander

Part Number	Magnification	Wavelength	Diameter of incident pupil	Exit pupil diameter	Maximum outer diameter of lens barrel	Lens length	Threaded connection mode
HY-BE-10.6-15X	1.5	10.6um	13	16	25	30	M22*0.75
HY-BE-10.6-2X	2	10.6um				35	M22*0.75
HY-BE-10.6-25X	2.5	10.6um	11			49.9	M22*0.75
HY-BE-10.6-3X	3	10.6um				10.8	M22*0.75
HY-BE-10.6-4X	4	10.6um				70.6	M22*0.75
HY-BE-10.6-5X	5	10.6um				87.2	M22*0.75
HY-BE-10.6-6X	6	10.6um				91.2	M22*0.75
HY-BE-10.6-8X	8	10.6um				68.9	M22*0.75

■Product parameters

1064nm Beam expander

Part Number	Magnification	Wavelength	Diameter of incident pupil	Exit pupil diameter	Maximum outer diameter of lens barrel	Lens length	Threaded connection mode
HY-BE-1064-1.5X	1.5	1064nm	10.4	21.6	27	39.7	M22*0.75
HY-BE-1064-2X	2					39.7	M22*0.75
HY-BE-1064-3X	3					68.5	M22*0.75
HY-BE-1064-4X	4					76	M22*0.75
HY-BE-1064-5X	5					71.8	M22*0.75
HY-BE-1064-6X	6					74	M22*0.75
HY-BE-1064-8X	8		6			68	M22*0.75
HY-BE-1064-10X	10					71.5	M22*0.75
HY-BE-1064-12X	12					77.7	M22*0.75
HY-BE-1064-15X	15					74	M22*0.75
HY-BE-1064-20X	20					83	M22*0.75
HY-BE-1064-22X	22					92.3	M22*0.75

Adjustable

Part Number	Magnification	Wavelength	Diameter of incident pupil	Exit pupil diameter	Maximum outer diameter of lens barrel	Lens length	Threaded connection mode
HY-BE-KT-1064-2X	2	1064nm	10.4	21.6	27	39.7	M22*0.75
HY-BE-KT-1064-3X	3					68.5	M22*0.75
HY-BE-KT-1064-4X	4					76	M22*0.75
HY-BE-KT-1064-5X	5					71.8	M22*0.75
HY-BE-KT-1064-6X	6					74	M22*0.75
HY-BE-KT-1064-8X	8		6			68	M22*0.75
HY-BE-KT-1064-10X	10					71.5	M22*0.75
HY-BE-KT-1064-12X	12					77.7	M22*0.75
HY-BE-KT-1064-15X	15					74	M22*0.75
HY-BE-KT-1064-20X	20					83	M22*0.75
HY-BE-KT-1064-22X	22					92.3	M22*0.75

Welding Beam Expander

Part Number	Magnification	Wavelength	Diameter of incident pupil	Exit pupil diameter	Maximum outer diameter of lens barrel	Lens length	Threaded connection mode
HY-BE-HK-1064-2X	2	1064nm	14	34	27	43.5	M22*0.75
HY-BE-HK-1064-2.5X	2.5					54.7	M22*0.75
HY-BE-HK-1064-3X	3					69	M22*0.75
HY-BE-HK-1064-4X	4					69	M22*0.75
HY-BE-HK-1064-5X	5					82.5	M22*0.75
HY-BE-HK-1064-6X	6					52.45	M22*0.75

Water cooling Beam Expander

Magnification	Wavelength	Diameter of incident pupil	Exit pupil diameter
2.5X	1064nm	14.4	29.4
3X	1064nm	14.4	29.4
4X	1064nm	14.4	29.4

Laser Collimating Lens

■Product introduction

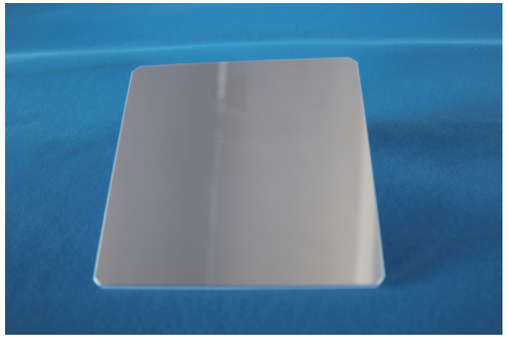
- Imported quartz material, high damage threshold coating.
- Laser collimator is mainly used in fiber output laser. According to the fiber interface, it can be divided into OBHand SMA905 and it is mainly uesd to collimate the divergent laser beam.

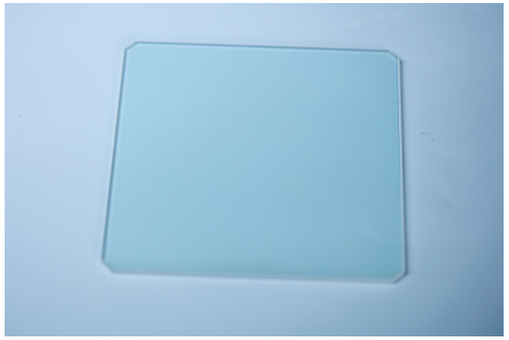
■Product parameters

QBH lock head collimating Lens

Part Number	Focal Length (mm)	Wavelength	Exit-beam Diameter (mm)	Max.lens-φ	Length (mm)	Water cooling or not	Connection mode
HY-QBH-1064-F40	40	1064	28	44	105	Optional	M36X1/4Flange4-φ3.4
HY-QBH-1064-F50	50				107	Optional	M36X1/4Flange4-φ3.4
HY-QBH-1064-F75	75				134	Optional	M36X1/4Flange4-φ3.4
HY-QBH-1064-F80	80				134	Optional	M36X1/4Flange4-φ3.4
HY-QBH-1064-F100	100				160	Optional	M36X1/4Flange4-φ3.4
HY-QBH-1064-F125	125				184	Optional	M36X1/4Flange4-φ3.4
HY-QBH-1064-F150	150				202	Optional	M36X1/4Flange4-φ3.4
HY-QBH-1064-F200	200				254	Optional	M36X1/4Flange4-φ3.4
HY-QBH-1064-F250	250				300	Optional	M36X1/4Flange4-φ3.4
HY-QBH-1064-F40-M36	40			43	104.7	No	M36X0.75
HY-QBH-1064-F40-M40	40				104.7	No	M40X0.75
HY-QBH-1064-F40-FL	40				104.7	No	4Flange4-Φ3.4
HY-QBH-1064-F40-SL	40				104.7	Yes	M40X0.75
HY-QBH-1064-F50-M36	50				106.9	No	M36X0.75
HY-QBH-1064-F50-FL	50				106.9	No	4Flange4-Φ3.4
HY-QBH-1064-F50-SL	50				106.9	Yes	M40X0.75
HY-QBH-1064-F60-SL	60				134.3	Yes	M40X0.75
HY-QBH-1064-F75-FL	75				134.3	No	4Flange4-Φ3.4
HY-QBH-1064-F75-SL	75				134.3	Yes	M40X0.75
HY-QBH-1064-F80-M36	80				134.3	No	M36X0.75
HY-QBH-1064-F80-FL	80				134.3	No	4Flange4-Φ3.4
HY-QBH-1064-F80-SL	80				134.3	Yes	M40X0.75
HY-QBH-1064-F100-M36	100				160.2	No	M36X0.75
HY-QBH-1064-F100-FL	100				160.2	No	4Flange4-Φ3.4
HY-QBH-1064-F100-SL	100				160.2	Yes	M40X0.75
HY-QBH-1064-F125-M36	125				184.2	No	M36X0.75
HY-QBH-1064-F125-SL	125				184.2	Yes	M40X0.75
HY-QBH-1064-F150-M36	150				210.8	No	M36X0.75
HY-QBH-1064-F150-SL	150				210.8	Yes	M40X0.75
HY-QBH-1064-F200-M36	200				251.3	No	M36X0.75
HY-QBH-1064-F200-SL	200				251.3	Yes	M40X0.75
HY-QBH-1064-F250-M36	250				300.1	No	M36X0.75
HY-QBH-1064-F250-FL	250				300.1	No	4Flange4-Φ3.4
HY-QBH-1064-F250-SL	250				300.1	Yes	M40X0.75
HY-QBH-915-F40-M36	40	915	28	43	104.7	No	M36X0.75
HY-QBH-915-F40-M40	40				104.7	No	M40X0.75
HY-QBH-915-F40-FL	40				104.7	No	4Flange4-Φ3.4
HY-QBH-915-F40-SL	40				104.7	Yes	M40X0.75
HY-QBH-915-F50-M36	50				106.9	No	M36X0.75
HY-QBH-915-F50-FL	50				106.9	No	4Flange4-Φ3.4
HY-QBH-915-F50-SL	50				106.9	Yes	M40X0.75
HY-QBH-915-F75-FL	75				134.3	No	4Flange4-Φ3.4
HY-QBH-915-F75-SL	75				134.3	Yes	M40X0.75
HY-QBH-915-F80-M36	80				134.3	No	M36X0.75
HY-QBH-915-F80-FL	80				134.3	No	4Flange4-Φ3.4
HY-QBH-915-F80-SL	80				134.3	Yes	M40X0.75
HY-QBH-915-F40	40				107	Optional	M36X1/4Flange4-φ3.4

Vision scheme lens





■Product introduction

- Vision scheme lenses are mainly optical accessories used for visual positioning of auxiliary laser processing equipment, including field mirror chromatic aberration elimination imaging lens and various vision scheme reflectors.

F50 CCD

- The achromatic field mirror CCD lens has a unique design to eliminate the achromatic field mirror, which can overlap the laser focal plane with the CCD visual focal plane of visible light, so as to achieve full field of view positioning capture of the coaxial vision scheme.

■Product parameters

45 ° reflector

Reflector lens	Incident Andle	Diameter(mm)	Thickness(mm)	Material	Wavelength(mm)
45° Reflect mirror	45°	20	3	K9/Silica	45°R1064nm T380-760nm
	45°	25	3	K9/Silica	45°R1064nm T380-760nm
	45°	30	4	K9/Silica	45°R1064nm T380-760nm
	45°	40	5	K9/Silica	45°R1064nm T380-760nm
	45°	45	3	K9/Silica	45°R1064nm T380-760nm
	45°	45	4	K9/Silica	45°R1064nm T380-760nm
	45°	45	5	K9/Silica	45°R1064nm T380-760nm
	45°	50	10	K9/Silica	45°R1064nm T380-760nm
	45°	60	5	K9/Silica	45°R1064nm T380-760nm
	45°	55*40	5	K9/Silica	45°R1064nm T380-760nm
	45°	54*38	5	K9/Silica	45°R1064nm T380-760nm

Pseudo coaxial vision scheme

Reflector lens	Incident Andle	Diameter (mm)	Material	Wavelength(mm)
45° Reflect mirror	45°	140*120*3	K9/Silica	45°R1064nmT380-760nm
	45°	120*120*3	K9/Silica	45°R1064nmT380-760nm
	45°	120*120*5	K9/Silica	45°R1064nmT380-760nm
	45°	90*70*5	K9/Silica	45°R1064nmT380-760nm
	45°	120*120*3	K9/Silica	45°R355nmT380-760nm
	45°	120*120*5	K9/Silica	45°R355nmT380-760nm

Transmission lens	Incident Andle	Diameter (mm)	Material	Wavelength(mm)
	45°	120*120*3	K9/Silica	45°T1064nm R380-760nm
	45°	110*100*3	K9/Silica	45°T1064nm R380-760nm
	45°	90*76*3	Silica	45°T1064nm R380-760nm
	45°	70*52*5	Silica	45°T1064nm R380-760nm
	45°	46*32*5	Silica	45°T1064nm R380-760nm
	45°	120*120*5	Silica	45°T355nm R450-660nm
	45°	95*70*3	Silica	45°T355nm R450-660nm
	Note: Support customization of other sizes			

Visual scheme CCD protective film

Incident Andle	Diameter(mm)	Material	Wavelength(mm)
0°	20*5	K9	0°R1064T380-760nm
0°	25*3	K9	0°R1064T380-760nm
0°	36*2	K9	0°R1064T380-760nm
0°	20*5	K9	0°R355T450-760nm
0°	25*3	K9	0°R355T450-760nm
0°	36*2	K9	0°R355T450-760nm

Confluent lens

1064 beam combining mirror	Incident Andle	Diameter (mm)	Thickness (nm)	Coating
Beam Combiner	45AOI	20	1.3	T>99%@1064nm,R>85%@650nm
	45AOI	20	2	T>99%@1064nm,R>85%@650nm
	45AOI	20	3	T>99%@1064nm,R>85%@650nm
	45AOI	25	2	T>99%@1064nm,R>85%@650nm
	45AOI	30	2	T>99%@1064nm,R>85%@650nm
	45AOI	45	3	T>99%@1064nm,R>85%@650nm

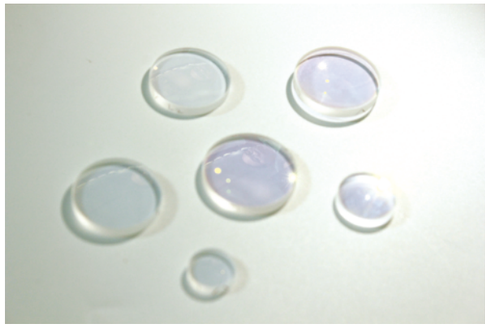
355 beam combining mirror

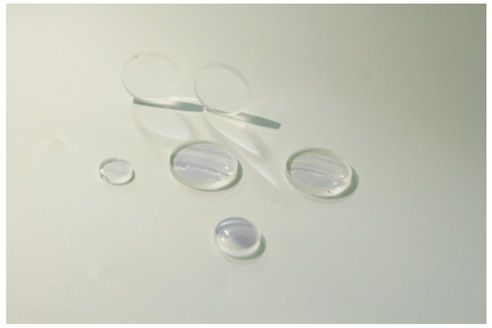
Incident Andle	Diameter(mm)	Thickness(nm)	Coating
45AOI	20	2	T>99%@355nm,R>85%@650nm
45AOI	25	2	T>99%@355nm,R>85%@650nm

Beam Combiner

Incident Andle	Diameter(mm)	Thickness(nm)	Coating
45AOI	20	2	98%T@1064nm, 85%R@633nm45°AOI, R-p0I
45AOI	25	2	
45AOI	38.1	3	

3D Dynamic Focus Series





■Product introduction

- High damage resistance, ultra-low absorption, low light loss and high transmittance.

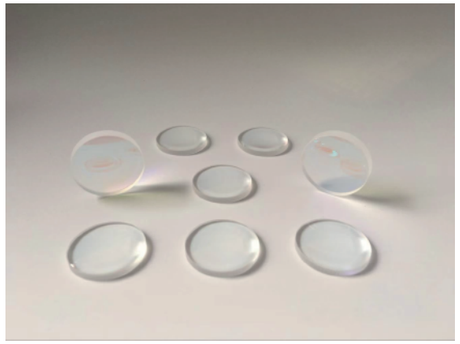
■Application industry

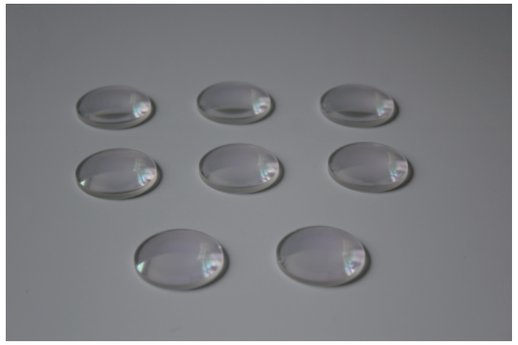
- Large scale cutting, marking, welding, 3D printing, etc.

■Product parameters

Product name	Flare size	Format/magnification	Lens	Drawing No	Diameter
Ultraviolet dynamic focusing	10 Flare	1.5X	L1	70-10	Φ16
			L2	70-16	Φ23
			L3	70-12	Φ25
Ultraviolet dynamic focusing	10 Flare	200*200	L1	70-32	Φ12
			L2	70-16	Φ23
			L3	70-44	Φ23
Ultraviolet dynamic focusing	10 Flare	300-600mm	L1	70-10	Φ16
			L2	70-16	Φ23
			L3	70-12	Φ25
Ultraviolet dynamic focusing	12 Flare	125*125*40 200*200*120 300*300*150	L1	17-10	Φ12
			L2	F200D20-1L	Φ20
			L3	F150D20-1L	Φ20
Ultraviolet dynamic focusing	12 Flare	400*400*150 500*500*150	L1	17-10	Φ12
			L2	F200D20-1L	Φ20
			L3	F200D20-1L	Φ20
Ultraviolet dynamic focusing	12 Flare	600*600*150	L1	17-10	Φ12
			L2	F200D20-1L	Φ20
			L3	F250D20-1L	Φ20
Optical fiber dynamic focusing	10 Flare	200mm	L1	70-10	Φ16
			L2	70-16	Φ23
			L3	59-55	Φ25
Optical fiber dynamic focusing	12 Flare	200-400mm	L1	70-10	Φ16
			L2	70-13	Φ23
			L3	70-12	Φ25
Optical fiber dynamic focusing	10 Flare	300mm	L1	17-10	Φ12
			L2	F200D20-1L	Φ20
			L3	F200D20-1L	Φ20
Optical fiber dynamic focusing	12 Flare	300mm	L1	70-39	Φ16
			L2	59-36	Φ25
			L3	59-83	Φ25.4
Optical fiber dynamic focusing	10 Flare	500mm	L1	17-10	Φ12
			L2	59-36	Φ25
			L3	70-12	Φ25
(488-700nm) Multi band dynamic focusing	20 Flare	200mm	L1	11-5	Φ16
			L2	F300D30-1L	Φ30
			L3	63-61	Φ30

Fousing Lens for welding





■Product parameters

Fousing Lens for welding 1064nm

Focal Length(mm)	Back Working(mm)	Type	Wavelength(mm)	Thread
52	50	Combined	355	M23*1
60	51	Combined	1064	M50*0.75/M46*1.5
70	60	Combined	1064	M50*0.75/M46*1.5
90	80	Combined	1064	M50*0.75/M46*1.5
110	100	Combined	1064	M50*0.75/M46*1.5
150	140	Combined	1064	M50*0.75/M46*1.5
200	190	Combined	1064	M50*0.75/M46*1.5
200	190	Single	1064	M50*0.75/M46*1.5

■Product parameters

Fousing Lens for weilding and cutting 1064nm

Focal Length (mm)	Luminous aperture	External diameter	Length	Working distance
58	34	41	20.5	52
77	34	41	23	68
90	34	41	23	82.4
100	34	41	23	92

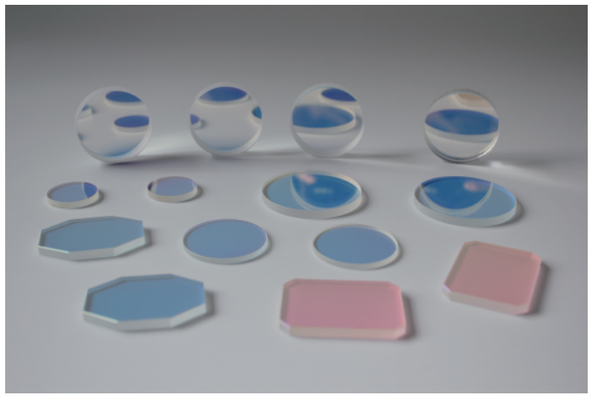
Laser scribing Lens 1064nm

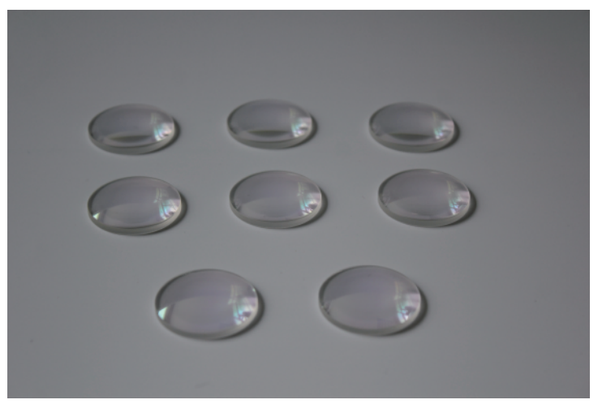
Focal Length(mm)	Luminous aperture	External diameter	Length	Working distance
58	34	41	20.5	52
77	34	41	18	68
90	34	41	18	82.4

Handheld welding head Lens series

Product name	Type	Diameter(mm)	Focal length	Material	Coating
Collimating& focusingLens	Monolithic	20	50	quartz	T1064+633
			70	quartz	
			120	quartz	
			150	quartz	
			200	quartz	
			250	quartz	
			300	quartz	
		30	80	quartz	
			100	quartz	
			120	quartz	
			150	quartz	
			200	quartz	
			250	quartz	
			300	quartz	
120 ° reflector	120 ° hand-held welding rectangular reflector	42*22*3		quartz	R1064+633 AOI 60°
		46*32*3		quartz	
Beveled Lens	0.3°	30*3		quartz	T1064+633
	0.5°			quartz	
	0.6°			quartz	
	1.0°			quartz	

Protective Window





■Product parameters

Protective Window

Diameter(mm)	Thickness(mm)	Material	Wavelength(nm)
27	2	Schott glass Fused silica	1064nm /355nm /532nm
36	2		
37	2		
38	2		
40	2		
42	3		
48	2		
48	3		
75	2		
75	3		
80	3		
100	3		
93	3		
113	3		
134	3		

Focusing Lens

Diameter(mm)	Focal length	Coating
φ20	F=50	AR /AR@1030 -1080nm
φ30	F=60	
φ20	F=63	
φ20	F=75	
φ30，φ36	F=76	
φ30，φ36	F=80	
φ20，φ25.4，φ28，φ36	F=100	
φ20，φ25.4，φ36	F=120	
φ25.4，φ36	F=125	
φ25.4，φ36	F=150	
φ36	F=180	
φ36	F=190	
φ36	F=200	
φ36	F=230	
φ36	F=250	
φ36	F=280	

Cutting focusing mirror (composite)

Diameter(mm)	Focal length	Coating
25	100	AR/AR@1030 -1080nm
25	125	
25	150	
28	100	
28	125	
28	150	
30	100	
30	125	
30	150	
30	200	
37	125	
37	150	
37	200	
38.1	125	
38.1	150	
38.1	175	
38.1	200	
41.5	125	
41.5	150	
41.5	175	
41.5	200	

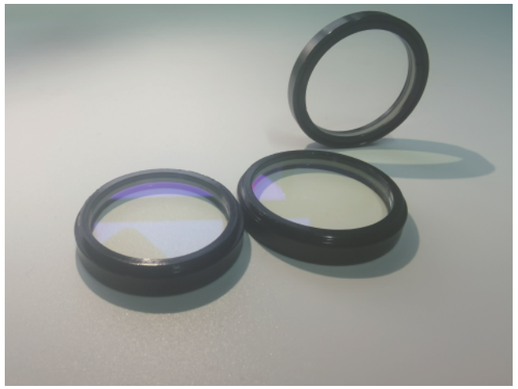
Total reflect mirror

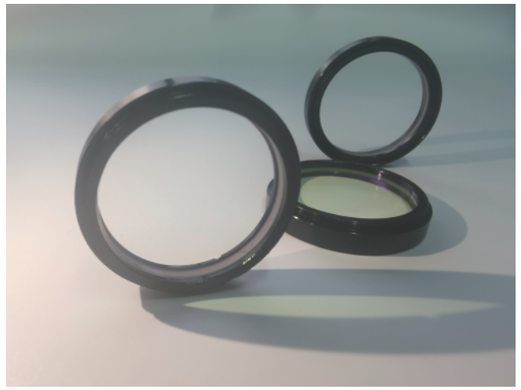
Incident Andle	Diameter(mm)	Thickness (nm)	wavelength
0°	12.7	3	808nm 1064nm 355nm
0°	20	4	1064nm 355nm
0°	20	5	
0°	20	6	
0°	20	8	
0°	20	10	
0°	19.05	9.7	
0°	19.05	10	

Reflect mirror

Incident Andle	Diameter(mm)	Thickness (nm)	wavelength
45°	20	3	1064nm 355nm
45°	25	3	
45°	30	4	
45°	40	5	
45°	45	3	
45°	45	4	
45°	45	5	
45°	50	10	
45°	60	5	
45°	55*40	5	
45°	54*38	5	

Optical Filter series





■Product introduction

- 400-700nm visible light high transmittance, infrared cut-off filter

■Application industry

- Laser cutting, laser welding, laser cladding, laser quenching.

■Product parameters

Product name	Product diameter	Coating
Optical filter	24*1mm	AR /AR@1030 -1080nm
Optical filter	25*1.1mm	
Optical filter	51*1.1mm	
Optical filter	58*1.1mm	
Optical filter	67*1.1mm	
Optical filter	9.5*1mm	
Optical filter	6*6*0.5mm	
Optical filter	6.8*6.8*0.5mm	
Optical filter	10*10*0.5mm	
Optical filter	10*10*1.1mm	
Optical filter	18*18*1.1mm	