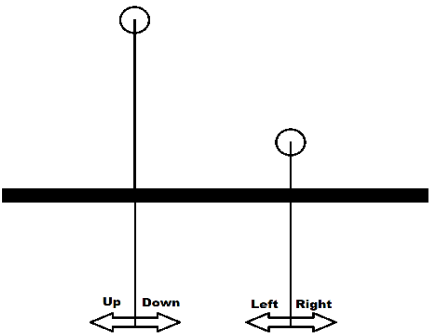
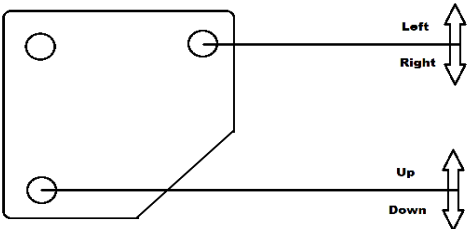
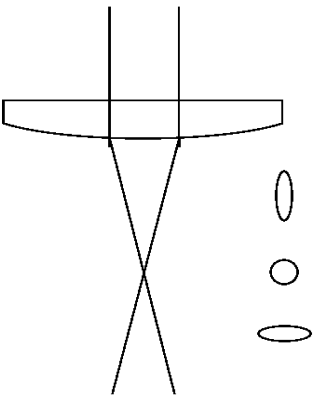


Image Density	VLS/PLS/ILS LPI	PLS/ILS (LPI) Superspeed	XLS LPI	DPI
1	83	83	83	500
2	200	200	200	500
3	250	250	250	500
4	333	333	333	500
5	500	400	400	500
6	1000	500	500	500
7	2000	666	666	1000
8		1000	1000	1000
9			2000	1000

Lens Fiber	Spot Size	Tolerance
4.0	.0025" (63um)	.04" (1.0mm)
2.0	.001" (25um)	.02" (.5mm)
HPDFO	.00025" (6um)	.006" (.15mm)
Lens CO2	Spot Size	Tolerance
4.0	.012" (.3mm)	.02" (5.0mm)
3.0	.010" (.25mm)	.15" (3.8mm)
2.5	.007" (.18mm)	.125" (3.2mm)
2.0	.005" (.13mm)	.1" (2.5mm)
1.5	.003" (.08mm)	.075" (1.9mm)
HPDFO	.001" (.03mm)	.02" (5.0mm)



System	Vector Max Speed	Raster Max Speed
VLS	10 in/s	50 in/s
PLS/ILS	20 in/s	70 in/s
XLS	40 in/s	120 in/s



Minimum and Maximum Diameter for Various Rotary Fixtures												
Rotary Fixture	Fixture Length	Max Part Length	Part Diameter Range									
			1.5" Lens		2.0" Lens		2.5" Lens		3.0" Lens		4.0" Lens	
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
VLS 2.30	18.75	12.00	1.00	5.25	0.50	5.00						
VLS 3.50	26.75	18.00	1.00	5.25	0.50	5.00						
VLS/PLS Standard	26.00	18.50	0.25	8.00	0.00	7.50	0.00	6.50			0.00	3.50
VLS/PLS Extended	41.00	33.00	1.50	8.00	1.00	7.50	0.50	6.50			0.00	3.50
ILS9	39.75	33.00			0.75	11.00			0.00	9.00		
ILS12	49.75	42.25			0.75	11.00			0.00	9.00		

Laser System Accuracy Specification	
Vector Accuracy - Non-Calibrated <0.005" per foot	Position Resolution .001"
Vector Accuracy - Calibrated <0.002"	Maximum Laser Pulsing Resolution X-Axis 1000 PPI
Vector Repeatability <0.002"	Maximum Raster Stepping Resolution Y-Axis 2000 LPI
Raster Repeatability <0.004" per foot	Raster Accuracy <0.010" per foot