

Working Distance for Telesis Laser Systems

Please note: The working distance is the distance from the outer edge of the lens assembly, the edge closest to the part, to the marking surface of the part. This is designated by dimension "F" in the drawings and datasheets. This, NOT the focal length of the lens, is the distance that should be used to properly position the laser for optimum marking. As you can see from the tables below, the optimum working distance for a 100mm lens is NOT 100mm. It is also a good idea to build in a little bit of adjustment in the laser mount to allow for variations in the parts.

Lens	Image Field Marking Widow CO Series Lasers		Working Distance (Edge of lens to part)	
	mm.	In.	mm.	In.
75 mm	50 x 50	1.97 x 1.97	54	2.13
100 mm	70 x 70	2.76 x 2.76	81	3.19
150 mm	100 x 100	3.94 x 3.94	131	5.16
200 mm	140 x 140	5.51 x 5.51	184	7.24
250 mm	170 x 170	6.69 x 6.69	233	9.17
300 mm	205 x 205	8.07 x 8.07	283	11.14
360 mm	250 x 250	9.84 x 9.84	351	13.82

Lens	Image Field Marking Widow EVC Lasers		Working Distance (Edge of lens to part)	
	mm.	In.	mm.	In.
100 mm	65 x 65	2.56 x 2.56	97	3.82
160 mm	110 x 110	4.33 x 4.33	176	6.93

Lens	Image Field Marking Widow EV10CDS Laser		Working Distance (Edge of lens to part)	
	mm.	In.	mm.	In.
100 mm	65 x 65	2.56 x 2.56	97	3.82
160 mm	110 x 110	4.33 x 4.33	175	6.89
254 mm	175 x 175	6.89 x 6.89	296	11.65

Lens	Image Field Marking Widow FQ Lasers		Working Distance (Edge of lens to part)	
	mm.	In.	mm.	In.
100 mm	65 x 65	2.56 x 2.56	98	3.86
160 mm	90 x 90	3.54 x 3.54	176	6.93
163 mm	110 x 110	4.33 x 4.33	185	7.28
254 mm	175 x 175	6.89 x 6.89	296	11.65
330 mm	230 x 230	9.06 x 9.06	387	15.24
350 mm	250 x 250	9.84 x 9.84	391	15.39
420 mm	290 x 290	11.42 x 11.42	493	19.41

Lens	Image Field Marking Widow EV15 Laser		Working Distance (Edge of lens to part)	
	mm.	In.	mm.	In.
100 mm	65 x 65	2.56 x 2.56	97	3.82
160 mm	110 x 110	4.33 x 4.33	176	6.93
254 mm	175 x 175	6.89 x 6.89	296	11.65
330 mm	230 x 230	9.06 x 9.06	387	15.24
420 mm	290 x 290	11.42 x 11.42	493	19.41

Lens	Image Field Marking Widow EV25 Laser		Working Distance (Edge of lens to part)	
	mm.	In.	mm.	In.
100 mm	65 x 65	2.56 x 2.56	98	3.86
160 mm	110 x 110	4.33 x 4.33	176	6.93
254 mm	175 x 175	6.89 x 6.89	296	11.65
330 mm	230 x 230	9.06 x 9.06	387	15.24
350 mm	250 x 250	9.84 x 9.84	391	15.39
420 mm	290 x 290	11.42 x 11.42	493	19.41