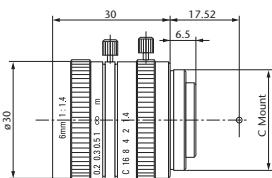


# CCTV Lens ML Series

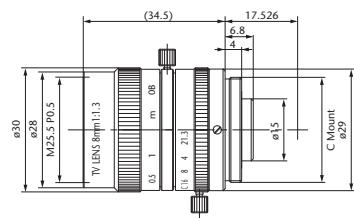
CCTV (Closed Circuit Television) lenses were developed to recognize images in a wide field of view. With all models, the variable iris and focus can be set with locking screws as needed.<sup>(\*)1</sup> The lenses also support micro imaging in combination with close-up ring and rear converter lenses.<sup>(\*)2</sup>

- A wide range of products from f=6mm to 100mm
- Variable focus and iris equipped with lock screws
- Camera mount: C mount

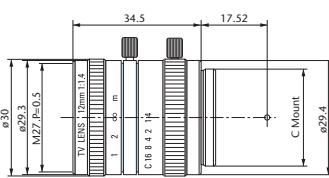
ML-0614



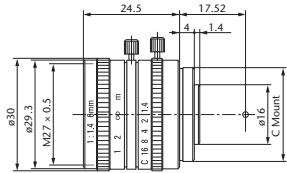
ML-0813



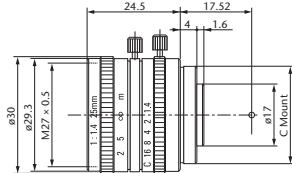
ML-1214



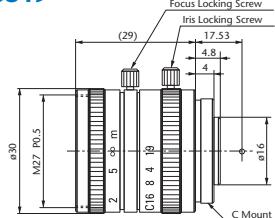
ML-1614



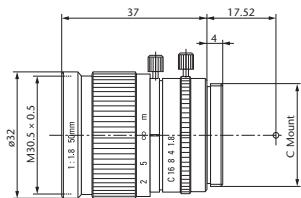
ML-2514



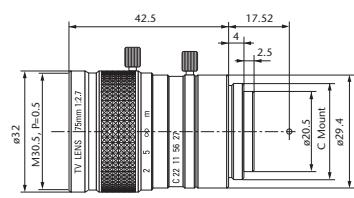
ML-3519



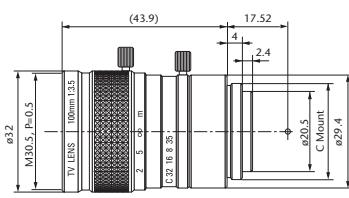
ML-5018



ML-7527



ML-10035



Model	Focal Distance	F No	Field of View(HxV)	Closest Distance	Filter Screw	Weight	Largest compatible Camera
ML-0614	6mm	F1.4 - close	42.3° x 54.6°	0.2m	M27 P0.5	60g	1/2"
ML-0813	8mm	F1.3 - close	45.0° x 57.8°	0.2m	M25.5 P0.5	60g	2/3"
ML-1214	12mm	F1.4 - close	21.9° x 29.0°	0.3m	M27 P0.5	60g	1/2"
ML-1614	16mm	F1.4 - close	23.0° x 30.4°	0.4m	M27 P0.5	40g	2/3"
ML-2514	25mm	F1.4 - close	21.6° x 28.5°	0.5m	M27 P0.5	45g	1"
ML-3519	35mm	F1.9 - close	10.8° x 14.4°	0.5m	M27 P0.5	50g	2/3"
ML-5018	50mm	F1.8 - close	7.9° x 10.5°	1m	M30.5 P0.5	60g	2/3"
ML-7527	75mm	F2.7 - close	4.9° x 6.5°	1m	M30.5 P0.5	65g	2/3"
ML-10035	100mm	F3.5 - close	3.8° x 5.1°	1m	M30.5 P0.5	65g	2/3"



(\*)1 Vibration resistance is not considered in design.

(\*)2 Image quality may be distorted with enlargement of lens tolerance.

**Field, WD, and Magnification when a Close-Up Ring is Used**

Close-Up Ring (mm)	ML-0614				ML-0813				ML-1214			
	Field of View (Length x Width)		WD (mm)	Magnification	Field of View (Length x Width)		WD (mm)	Magnification	Field of View (Length x Width)		WD (mm)	Magnification
	1/2"	1/3"			1/2"	1/3"			1/2"	1/3"		
0	165 x 221	124 x 165	200	0.03x	96 x 128	72 x 96	148	0.05x	103 x 137	77 x 103	248	0.05x
0.5	44 x 58	33 x 44	43	0.11x	43 x 57	32 x 43	59	0.11x	55 x 73	41 x 55	125	0.09x
	60 x 79	45 x 60	63	0.08x	77 x 102	57 x 77	115	0.06x	119 x 159	89 x 119	289	0.04x
1	25 x 34	19 x 25	19	0.19x	27 x 37	21 x 27	34	0.18x	38 x 50	28 x 38	80	0.13x
	30 x 40	22 x 30	25	0.16x	38 x 51	29 x 38	52	0.13x	59 x 79	45 x 59	136	0.08x
1.5					20 x 27	15 x 20	22	0.24x	29 x 38	21 x 29	57	0.17x
					26 x 34	19 x 26	31	0.19x	40 x 53	30 x 40	85	0.12x
2									23 x 31	17 x 23	42	0.21x
									30 x 40	22 x 30	59	0.16x

Close-Up Ring (mm)	ML-1614				ML-2514				ML-3519			
	Field of View (Length x Width)		WD (mm)	Magnification	Field of View (Length x Width)		WD (mm)	Magnification	Field of View (Length x Width)		WD (mm)	Magnification
	1/2"	1/3"			1/2"	1/3"			1/2"	1/3"		
0	109 x 145	82 x 109	358	0.04x	87 x 115	65 x 87	458	0.06x	66 x 87	49 x 66	500	0.07x
0.5	64 x 86	48 x 64	206	0.07x	64 x 85	48 x 64	338	0.08x	55 x 73	41 x 55	422	0.09x
	156 x 208	117 x 156	515	0.03x	242 x 322	181 x 242	1270	0.02x	335 x 447	251 x 335	2459	0.01x
1	45 x 61	34 x 45	143	0.11x	50 x 67	38 x 50	269	0.10x	47 x 63	35 x 47	366	0.10x
	78 x 104	58 x 78	252	0.06x	121 x 161	91 x 121	637	0.04x	168 x 223	126 x 168	1240	0.03x
1.5	35 x 47	26 x 35	108	0.14x	42 x 56	31 x 42	223	0.12x	41 x 55	31 x 41	324	0.12x
	52 x 69	39 x 52	164	0.09x	81 x 107	60 x 81	425	0.06x	112 x 149	84 x 112	834	0.04x
2	29 x 38	22 x 29	86	0.17x	36 x 47	27 x 36	191	0.13x	37 x 49	28 x 37	291	0.13x
	39 x 52	29 x 39	120	0.12x	60 x 81	45 x 60	320	0.08x	84 x 112	63 x 84	631	0.06x
5	14 x 18	10 x 14	35	0.35x	19 x 25	14 x 19	103	0.25x	22 x 30	17 x 22	185	0.22x
	16 x 21	12 x 16	42	0.31x	24 x 32	18 x 24	130	0.20x	34 x 45	25 x 34	265	0.14x
10	7.3 x 9.7	5.4 x 7.3	14	0.66x	11 x 14	8 x 11	60	0.45x	13 x 18	10 x 13	121	0.36x
	7.8 x 10	5.8 x 7.8	15	0.62x	12 x 16	9.1 x 12	66	0.40x	17 x 22	13 x 17	143	0.29x
15					7.4 x 9.8	5.5 x 7.4	43	0.65x	9.5 x 13	7.2 x 9.5	93	0.50x
					8.1 x 11	6 x 8.1	45	0.60x	11 x 15	8.4 x 11	103	0.43x
20					5.6 x 7.5	4.2 x 5.6	34	0.85x	7.4 x 9.9	5.6 x 7.4	78	0.65x
					6 x 8.1	4.5 x 6	35	0.79x	8.4 x 11	6.3 x 8.4	82	0.57x
25									6.1 x 8.1	4.6 x 6.1	68	0.79x
									6.7 x 8.9	5 x 6.7	70	0.72x

Close-Up Ring (mm)	ML-5018				ML-7527				ML-10035			
	Field of View (Length x Width)		WD (mm)	Magnification	Field of View (Length x Width)		WD (mm)	Magnification	Field of View (Length x Width)		WD (mm)	Magnification
	1/2"	1/3"			1/2"	1/3"			1/2"	1/3"		
0	90 x 120	68 x 90	943	0.05x	60 x 80	45 x 60	1000	0.08x	46 x 62	35 x 46	1000	0.10x
1.5	57 x 76	43 x 57	610	0.08x								
	154 x 205	115 x 154	1577	0.03x								
2	51 x 67	38 x 51	548	0.10x	43 x 57	32 x 43	776	0.11x				
	115 x 154	86 x 115	1193	0.04x	184 x 246	138 x 184	3189	0.03x				
5	31 x 41	23 x 31	347	0.16x	30 x 40	23 x 30	607	0.16x	27 x 37	21 x 27	724	0.18x
	46 x 61	35 x 46	503	0.10x	74 x 98	55 x 74	1422	0.07x	95 x 127	71 x 95	2413	0.05x
10	18 x 25	14 x 18	226	0.26x	20 x 27	15 x 20	475	0.24x	19 x 26	15 x 19	609	0.25x
	23 x 31	17 x 23	273	0.21x	37 x 49	28 x 37	833	0.13x	48 x 63	36 x 48	1432	0.10x
15	13 x 18	10 x 13	174	0.37x	15 x 20	11 x 15	408	0.32x	15 x 20	11 x 15	546	0.32x
	15 x 21	12 x 15	196	0.31x	25 x 33	18 x 25	636	0.20x	32 x 42	24 x 32	1105	0.15x
20	10 x 14	7.7 x 10	145	0.47x	12 x 16	9 x 12	369	0.40x	12 x 16	9 x 12	505	0.39x
	12 x 15	8.6 x 12	158	0.42x	18 x 25	14 x 18	538	0.26x	24 x 32	18 x 24	941	0.20x
25	8.4 x 11	6.3 x 8.4	126	0.57x	10 x 14	7.6 x 10	342	0.47x	10 x 14	8 x 10	478	0.46x
	9.2 x 12	6.9 x 9.2	134	0.52x	15 x 20	11 x 15	479	0.33x	19 x 25	14 x 19	843	0.25x
30	7.1 x 9.4	5.3 x 7.1	113	0.68x	8.7 x 12	6.5 x 8.7	323	0.55x	9 x 12	6.7 x 9	458	0.54x
	7.7 x 10	5.8 x 7.7	119	0.63x	12 x 16	9.2 x 12	440	0.39x	16 x 21	12 x 16	778	0.30x
35	6.1 x 8.2	4.6 x 6.1	104	0.78x	7.6 x 10	5.7 x 7.6	309	0.63x	7.9 x 11	5.9 x 7.9	443	0.61x
	6.6 x 8.8	4.9 x 6.6	108	0.73x	11 x 14	7.9 x 11	412	0.46x	14 x 18	10 x 14	731	0.35x
40	5.4 x 7.2	4.1 x 5.4	97	0.89x	6.7 x 9	5.1 x 6.7	297	0.71x	7.1 x 9.4	5.3 x 7.1	430	0.68x
	5.8 x 7.7	4.3 x 5.8	100	0.83x	9.2 x 12	6.9 x 9.2	391	0.52x	12 x 16	8.9 x 12	696	0.40x
45					6.1 x 8.1	4.6 x 6.1	289	0.79x	6.4 x 8.5	4.8 x 6.4	421	0.75x
					8.2 x 11	6.1 x 8.2	375	0.59x	11 x 14	7.9 x 11	669	0.45x
50					5.5 x 7.4	4.1 x 5.5	281	0.87x	5.8 x 7.8	4.4 x 5.8	412	0.82x
					7.4 x 9.8	5.5 x 7.4	361	0.65x	9.5 x 13	7.1 x 9.5	647	0.50x
60									5 x 6.6	3.7 x 5	400	0.97x
									7.9 x 11	5.9 x 7.9	614	0.61x

• Indicated values are based on calculation and actual measurements may differ. Please use values as a reference.

• Accuracy of the products is guaranteed only when used without additional attachments. Please note that when using in combination with a close-up ring or other equipment, working distance, distortion and image quality may be distorted due to enlargement of the lens tolerance.