

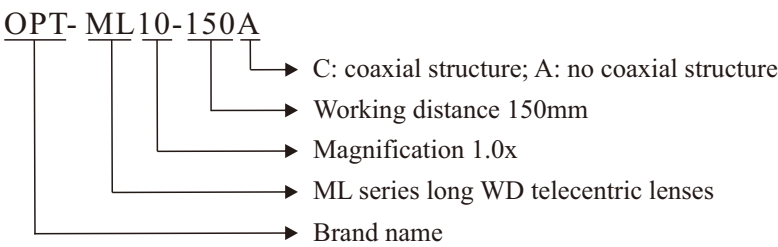
ML Series Long WD Telecentric Lenses



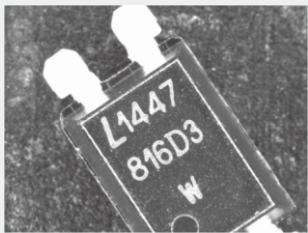
Product Features

- 1 Working distance from 150mm to 650mm
- 2 Compatible to industrial cameras below 2MP resolution
- 3 Max compatible to industrial cameras with 1/1.8" sensor, some only compatible to 1/3" sensor
- 4 Object side telecentric design

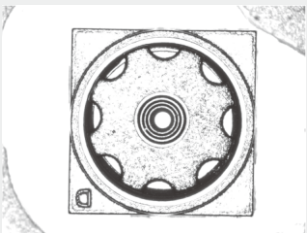
Selection Guide



Application Examples



IC surface characters inspection



Inspection for precision metal parts



Alignment and attaching

Model Table

No.	Model	WD (mm) [1]	Mag. (x)	Image circle ($\varnothing$ mm)	Aperture (F/#) [2]	Distortion (% Max)	DOF (mm) [3]	Mount	Weight (kg)	FOV(mm×mm)			
										1/3"	1/2.5"	1/2"	1/1.8"
										4.8×3.6	5.7×4.2	6.5×4.9	7.2×5.4
1	OPT-ML10-150A	150±4	1	8	21	0.18	1.73	C	0.07	4.8×3.6	5.7×4.2	6.5×4.9	-
2	OPT-ML05-200A	200±6	0.5	8	18.8	0.36	6.2	C	0.08	9.6×7.2	11.4×8.4	13×9.8	-
3	OPT-ML20-200C	200±6	2	6	41.6	0.055	0.86	C	0.07	2.4×1.8	-	-	-
4	OPT-ML022-250A	250±7	0.22	7.2	16	0.5	27.27	C	0.05	21.8×16.4	25.9×19.1	-	-
5	OPT-ML05-250A	250±7	0.5	8	22.7	0.22	7.49	C	0.05	9.6×7.2	11.4×8.4	13×9.8	-
6	OPT-ML20-250C	250±7	2	9	27.8	0.2	0.57	C	0.19	2.4×1.8	2.9×2.1	3.3×2.5	3.6×2.7
7	OPT-ML08-300A	300±9	0.8	8	20	0.035	2.58	C	0.10	6×4.5	7.1×5.3	8.1×6.1	-
8	OPT-ML10-300A	300±9	1	8	21	0.1	1.73	C	0.14	4.8×3.6	5.7×4.2	6.5×4.9	-
9	OPT-ML20-300C	300±9	2	8	33	0.17	0.68	C	0.2	2.4×1.8	2.9×2.1	3.3×2.5	-
10	OPT-ML10-420C	420±12	1	6	27	0.2	2.23	C	0.18	4.8×3.6	-	-	-
11	OPT-ML05-510A	510±15	0.5	8	25	0.27	8.25	C	0.15	9.6×7.2	11.4×8.4	13×9.8	-
12	OPT-ML05-650A	650±20	0.5	6	25	0.055	8.25	C	0.12	9.6×7.2	-	-	-

Remarks:

1. Working distance, the distance between the front end of the mechanics and the object.
2. The real F# of a lens when using. Lenses with smaller apertures can be workable.
3. At the borders of the DOF the image still can be used for measurement. But only half of the nominal DOF can get sharp images.

Dimensional Drawings [mm]

1 OPT-ML10-150A	2 OPT-ML05-200A	3 OPT-ML20-200C
4 OPT-ML022-250A	5 OPT-ML05-250A	6 OPT-ML20-250C
7 OPT-ML08-300A	8 OPT-ML10-300A	9 OPT-ML20-300C

