

MVL-AF5040M-M42

Large Format $\Phi 37$ mm 50 mm Focal Length FA Lens

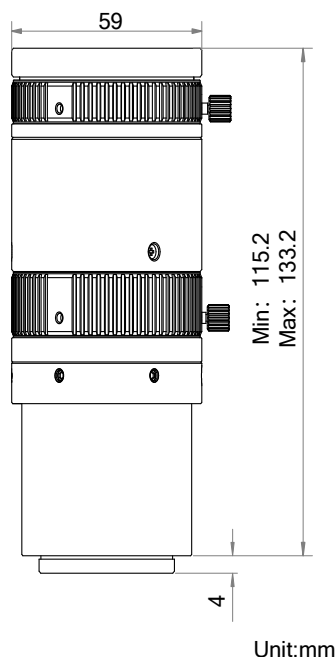
The APS-C fixed-focus lens are optimized for the application of large pixel line scan cameras in the machine vision industry, with excellent imaging quality, high image uniformity and low distortion design, magnification range from 0.01 x to 0.33 x. It is suitable for defect detection applications in PCB, packaging and printing industry.



Key Features

- Provides ultra-high image resolution and compatible with 3.1 μm resolution.
- Provides excellent consistency of image clarity, large aperture, low distortion, low chromatic aberration, and high relative illumination.
- Provides max. image size $\Phi 37$ mm for APS-C area scan and 4k 7 μm line scan cameras.

Dimension



Specification

Model	MVL-AF5040M-M42
Parameter	Fixed focal length, Manual iris, Large format lens
Performance	
Focal length	50 mm
F-number	F4 to F22
Image size	Φ37 mm
Optical distortion	0.21%
Magnification range	0.323 x to 0.01 x
Working distance range	150 mm to inf mm
Mechanical	
Iris control	Manual
Focus control	Manual
Filter thread	M52 × 0.75
Mount	M42 × P1
Flange back length	12 mm
Dimension	Φ59 mm × 133.2 mm (Φ2.3" × 5.2")
Weight	615 g (1.4 lb.)
Temperature	-10 °C to 50 °C (14 °F to 122 °F)
General	
Certification	RoHS 2.0

Field of View

Working Distance (mm)	Magnification	Object Image Distance (mm)	Field of View H (4k 7 μm)
150	-0.323	293	88.9
200	-0.245	340	117.5
250	-0.197	387	146.1
300	-0.165	436	174.7
350	-0.141	485	203.3
400	-0.124	534	231.9
450	-0.110	583	260.5
500	-0.100	633	289.2
550	-0.091	682	317.8
600	-0.083	732	346.4
650	-0.077	782	375.0
700	-0.071	831	403.6
750	-0.067	881	432.2
800	-0.062	931	460.9
850	-0.059	981	489.5
900	-0.056	1031	518.1
950	-0.053	1080	546.7
1000	-0.050	1130	575.3
1100	-0.046	1230	632.6
1200	-0.042	1330	689.8
1300	-0.039	1430	747.0
1400	-0.036	1530	804.3
1500	-0.033	1629	861.5

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