

# MVL-LF5040M-F

## Large Format (Ø56mm) 50mm Focal Length FA LENS

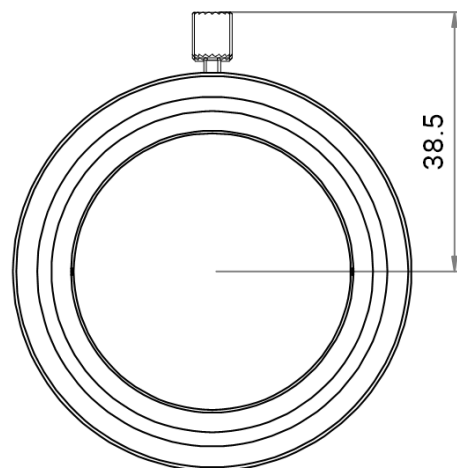
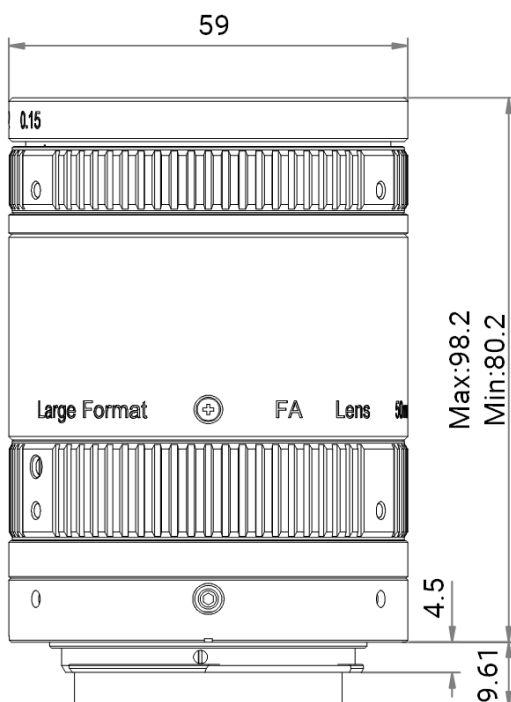
LF series large format FA Lens are optimized for machine vision light sources and sensors, with excellent imaging quality and high image uniformity, magnification range from 0.01x to 0.33x. It is suitable for high resolution machine vision industry applications.



### Key Features

- Ultra high central image clarity, up to 3.1µm resolution
- Low distortion and high relative illumination
- Image size Ø56 mm, supporting large target area scan cameras, 8K 5µm, 8K 7µm, 16K 3.5µm line scan cameras
- Optimize optical design for different magnification

### Dimension



Unit: mm

## Specification

Parameter	Model	MVL-LF5040M-F
		Fixed focal length, Manual iris, Large format lens
<b>Performance</b>		
Focal length		50 mm
F-number		F4.0 to F22
Image size		Ø56 mm
Optical distortion		0.41%
Magnification range		0.33 x to 0.01 x
Working distance range		150 mm to inf mm
<b>Mechanical</b>		
Iris control		Manual
Focus control		Manual
Filter thread		M52 × 0.75
Mount		F-mount
Flange back length		46.5 mm
Dimension		Ø59 mm × 98.2 mm (Ø2.32" × 3.87")
Weight		601.5 g (1.33 lb.)
Temperature		-10 °C to 50 °C (14 °F to 122 °F)
<b>General</b>		
Certification		RoHS 2.0

## Field of View

Working Distance (mm)	Magnification	Field of View (mm)					
		H(23mm)	V(23mm)	H(36.17mm)	V(24.11mm)	H(8K 5μm)	H(8K 7μm 16K 3.5μm)
150	-0.331	69.62	69.62	109.29	72.86	123.77	173.24
200	-0.249	92.50	92.50	145.20	96.80	164.44	230.30
250	-0.200	115.38	115.38	181.12	120.74	205.11	286.72
300	-0.167	138.26	138.26	217.03	144.69	245.79	343.38
350	-0.143	161.13	161.13	252.95	168.63	286.46	401.01
400	-0.125	184.03	184.03	288.88	192.59	327.16	458.75
450	-0.111	206.89	206.89	324.78	216.52	367.81	516.61
500	-0.100	230.40	230.40	361.68	241.12	409.60	573.44
550	-0.091	252.65	252.65	396.61	264.41	449.16	630.15
600	-0.084	275.53	275.53	432.52	288.35	489.83	682.67
700	-0.072	321.29	321.29	504.37	336.24	571.19	796.44
800	-0.063	367.05	367.05	576.20	384.13	652.54	910.22
900	-0.056	412.80	412.80	648.01	432.01	733.87	1024.00
1000	-0.050	458.56	458.56	719.85	479.90	815.22	1146.88
1100	-0.046	504.31	504.31	791.67	527.78	896.56	1246.61
1200	-0.042	550.08	550.08	863.51	575.67	977.92	1365.33
1300	-0.039	595.83	595.83	935.32	623.55	1059.25	1470.36
1400	-0.036	641.59	641.59	1007.16	671.44	1140.60	1592.89
1500	-0.034	687.35	687.35	1079.00	719.33	1221.96	1686.59

**HIKROBOT**

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