

MVL-LF5040M-F

Large Format ($\Phi 56\text{mm}$) 50mm Focal Length FA LENS

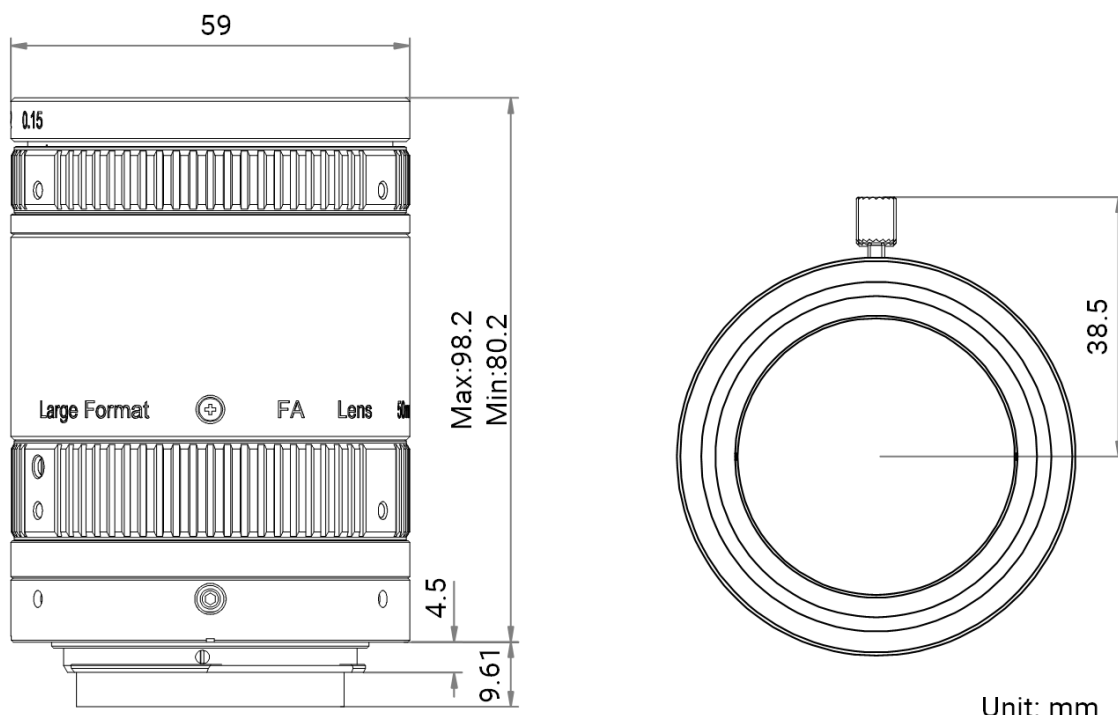
LF series large format FA Lens are optimized for machine vision light sources and sensors, with excellent imaging quality and high image uniformity, magnification range from 0.01x to 0.33x. It is suitable for high resolution machine vision industry applications.



Key Features

- Ultra high central image clarity, up to 3.1 μm resolution
- Low distortion and high relative illumination
- Image size $\Phi 56\text{ mm}$, supporting large target area scan cameras, 8K 5 μm , 8K 7 μm , 16K 3.5 μm line scan cameras
- Optimize optical design for different magnification

Dimension



Specification

Model	MVL-LF5040M-F
Parameter	Fixed focal length, Manual iris, Large format lens
Performance	
Focal Length	50 mm
F-Number	F4.0 ~ F22
Image Size	Φ56 mm
Optical Distortion	0.41%
Magnification Range	0.33x ~ 0.01x
Working Distance Range	150 ~ inf mm
Mechanical	
Iris Control	Manual
Focus Control	Manual
Filter Thread	M52 × 0.75
Mount	F-Mount
Flange Back Length	46.5 mm
Dimension	Φ59 × 98.2 mm
Weight	601.5 g
Temperature	-10 ~ 50°C
General	
Certification	RoHS2.0

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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