

MVL-MF0828M-8MP

2/3" 8 mm 8 MP FA Lens

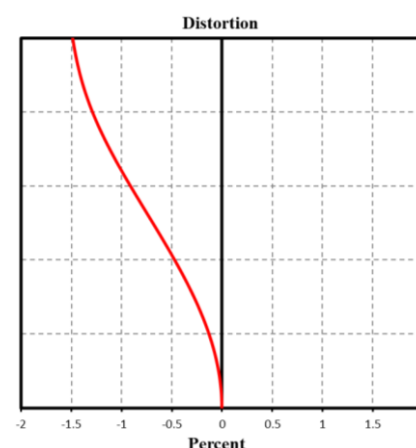
MF series FA Lens are optimized for machine vision light sources and sensor, with high resolution, excellent image quality, high transmittance and good stability. Featured with fixed focal length, manual aperture and compact size, it is suitable for machine vision industry applications and ideal for industrial cameras.



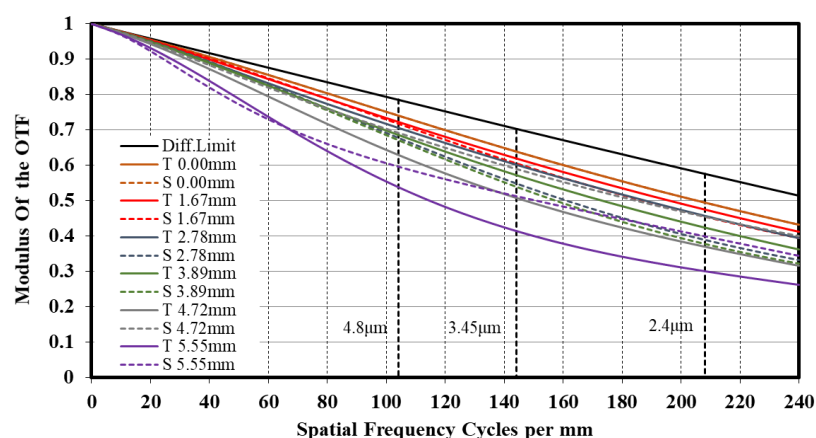
Key Features

- Ultra-high resolution and consistency of image clarity
- Ultra-low distortion and higher relative illumination
- Achromatic optical system design, better image performance with color camera
- Supports ultra-short working distance with good optical performance
- Compact design, excellent vibration resistance and high and low temperature performance

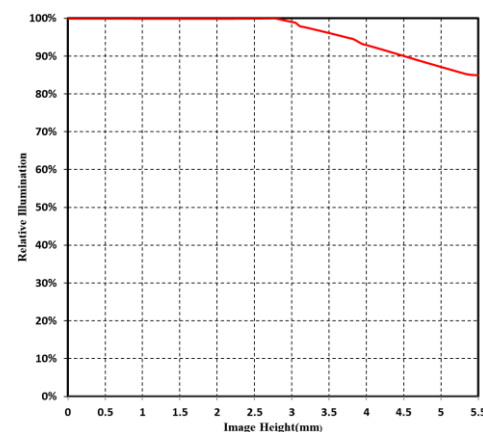
Distortion



MTF



Relative Illumination

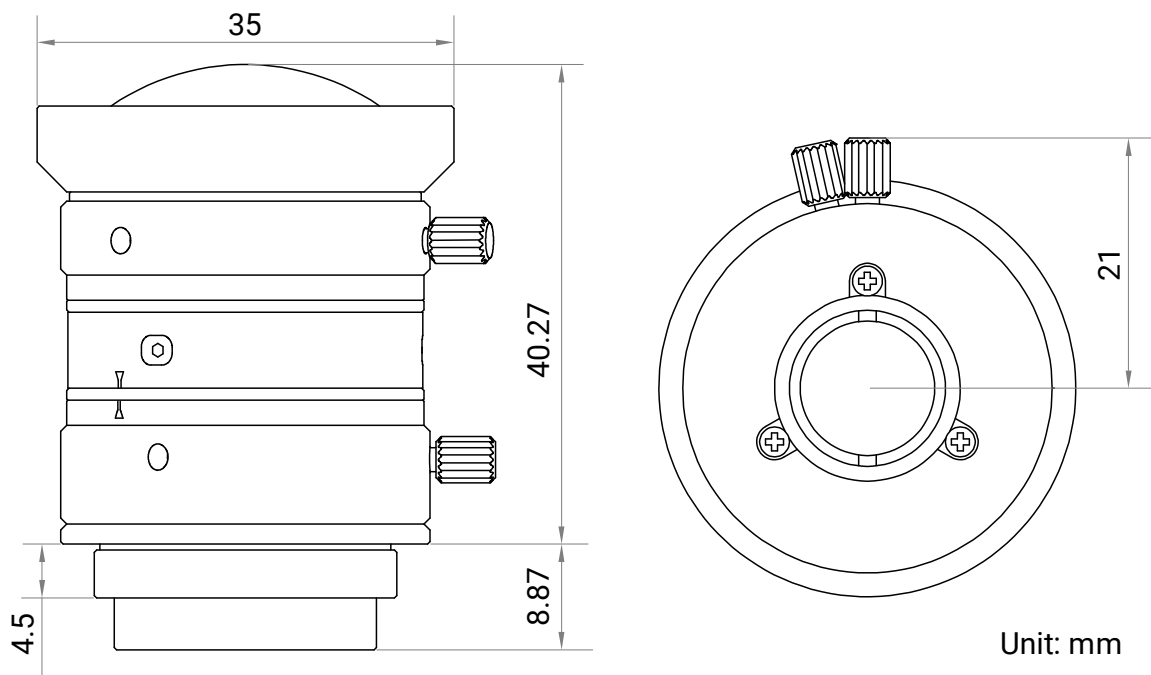


Note: The above curves are the simulate results based on F2.8, $\beta = -0.03$, WD=250 mm.

Specification

Model	MVL-MF0828M-8MP
Performance	
Focal length	8 mm
F-number	F2.8 to F16
Image size	Ø11 mm (2/3")
Distortion	0.28%
Minimum object distance	0.1 m
Field of view	D (11.1 mm): 68.46° H (8.45 mm): 54.97° V (7.07 mm): 47.06°
Mechanical	
Iris control	Manual
Focus control	Manual
Mount	C-mount
Flange back length	17.526 mm
Dimension	Ø35 mm × 40.27 mm (Ø1.4" × 1.6")
Weight	80.7 g (0.2 lb.)
Temperature	-10 °C to 50 °C (14 °F to 122 °F)
General	
Certification	RoHS 2.0

Dimension



Field of View

Extension (mm)	Working Distance (mm)		Magnification	Field of View (mm)					
				2/3"		1/1.8"		1/2"	
				H (8.45)	V (7.07)	H (7.38)	V (4.92)	H (6.22)	V (4.67)
2	near	8.86	-0.319	26.49	22.16	23.13	15.42	19.50	14.64
	far	15.46	-0.250	33.79	28.27	29.51	19.67	24.87	18.67
1	near	25.02	-0.194	43.56	36.44	38.04	25.36	32.06	24.07
	far	47.43	-0.125	67.56	56.52	59.00	39.33	49.73	37.34
0	100		-0.069	125.75	104.62	109.35	72.25	91.75	68.52
	150		-0.049	183.02	151.33	159.26	105.19	133.67	99.74
	200		-0.037	230.95	192.65	201.25	133.40	169.16	126.55
	250		-0.030	282.15	235.78	246.01	163.27	206.91	154.91
	300		-0.025	334.04	279.34	291.36	193.49	245.13	183.59
	350		-0.022	395.07	328.41	344.53	228.43	289.73	216.66
	400		-0.019	437.82	366.46	382.07	253.93	321.57	240.96
	450		-0.017	489.71	410.03	427.42	284.16	359.80	269.64
	500		-0.016	545.97	456.36	476.48	316.62	401.04	300.41
	550		-0.014	598.28	500.19	522.19	347.05	439.55	329.30
	600		-0.013	650.58	544.01	567.90	377.49	478.06	358.18
	650		-0.012	702.89	587.84	613.60	407.92	516.57	387.07
	700		-0.011	756.08	632.22	660.06	438.82	555.69	416.38
	800		-0.010	860.81	719.95	751.58	499.75	632.80	474.20
	900		-0.009	965.54	807.68	843.09	560.59	709.91	532.03
	1000		-0.008	1070.95	895.82	935.18	621.97	787.48	590.18