

MVL-MF0828M-10MPE

2/3" 8 mm 10 MP FA Lens

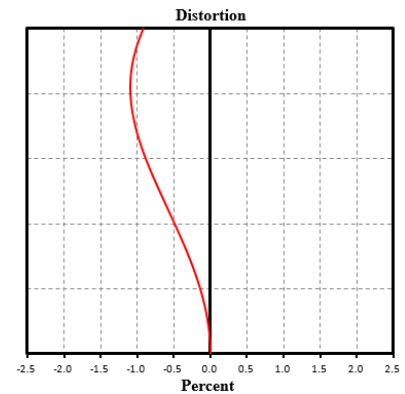
MF-10MPE series FA Lens are optimized for machine vision light sources and sensors, with high resolution, excellent image uniformity, high transmittance and good stability. Featured with fixed focal length, manual aperture, and compact size, it is suitable for machine vision industry applications.



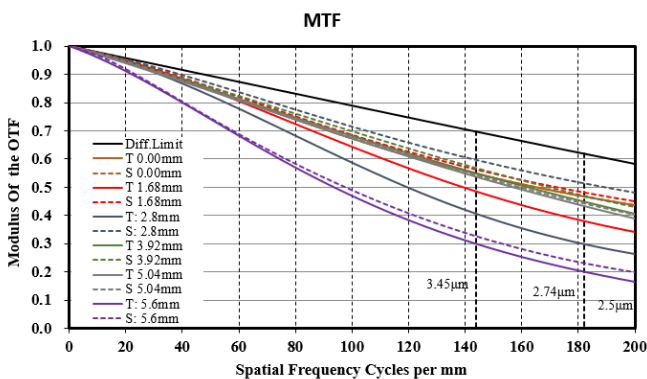
Key Feature

- High resolution and consistency of image clarity
- Lower distortion and higher relative illumination rate
- Excellent performance at high and low temperature
- Good optical performance at short working distance

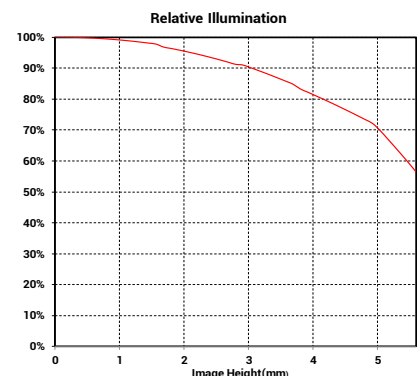
Distortion



MTF



Relative Illumination

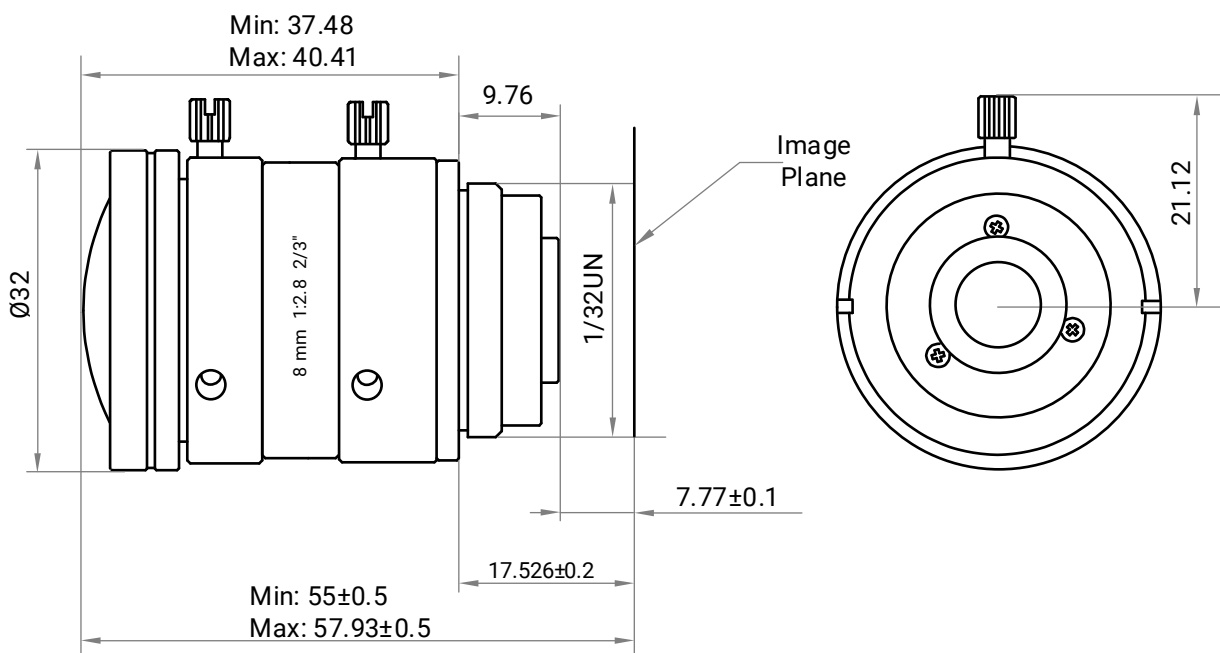


Note: The above curves are the simulate results based on F2.8, $\beta = -0.02$, WD=400 mm.

Specification

Model	MVL-MF0828M-10MPE
Performance	
Focal length	8 mm
F-number	F2.8 to F16
Image size	Φ11.2 mm (2/3")
Distortion	-0.42%
Min. object distance	0.1 m
Field of view	D (11.01 mm): 67.07° H (8.45 mm): 54.06° V (7.07 mm): 46.21°
Mechanical	
Iris control	Manual
Focus control	Manual
Filter thread	/
Mount	C-mount
Flange back length	17.526 mm
Dimension	Φ32 mm × 37.48 mm to 40.41 mm (Φ1.3" × 1.5" to 1.6")
Weight	70 g (0.2 lb.)
Temperature	-10 °C to 50 °C (14 °F to 122 °F)
General	
Certification	RoHS 2.0

Dimension



Unit: mm

Field of View

Extension (mm)	Working Distance (mm)		Magnification	Field of View (mm)					
				2/3"		1/1.8"		1/2"	
				H (8.45mm)	V (7.07mm)	H (7.38mm)	V (4.92mm)	H (6.22mm)	V (4.67mm)
2	Near	10.8	-0.307	29.3	24.1	25.2	16.4	21.0	15.5
	Far	16.0	-0.248	36.2	29.8	31.2	20.3	26.0	19.2
1	Near	28.0	-0.190	46.6	38.5	40.3	26.4	33.6	25.0
	Far	48.6	-0.124	70.6	58.5	61.2	40.2	51.2	38.1
0		100	-0.073	118.4	98.4	102.9	67.9	86.3	65.8
		150	-0.050	170.8	142.3	148.7	98.4	124.9	95.4
		200	-0.039	223.3	186.2	194.5	128.9	163.5	124.9
		250	-0.031	275.7	230.1	240.3	159.4	202.1	154.5
		300	-0.026	328.1	274.0	286.1	189.8	240.7	184.0
		350	-0.023	380.5	317.9	332.0	220.3	279.2	213.5
		400	-0.020	432.9	361.7	377.8	250.8	317.8	243.1
		450	-0.018	485.3	405.6	423.6	281.3	356.4	272.6
		500	-0.016	537.8	449.5	469.4	311.8	395.0	302.2
		550	-0.015	590.2	493.4	515.2	342.2	433.6	331.7
		600	-0.013	642.6	537.2	560.5	372.7	472.2	361.3
		650	-0.012	695.0	581.1	606.7	403.2	510.7	390.8
		700	-0.114	747.4	625.0	652.5	433.7	549.3	420.4
		800	-0.010	852.2	712.7	744.1	494.6	626.5	479.5
	900	-0.009	957.0	800.5	835.7	555.6	703.7	538.5	
	1000	-0.008	1061.8	888.2	927.3	616.6	780.8	597.6	

HIKROBOT

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