

MVL-HF2524M-10MP

1/1.8" 25mm 10MP FA LENS

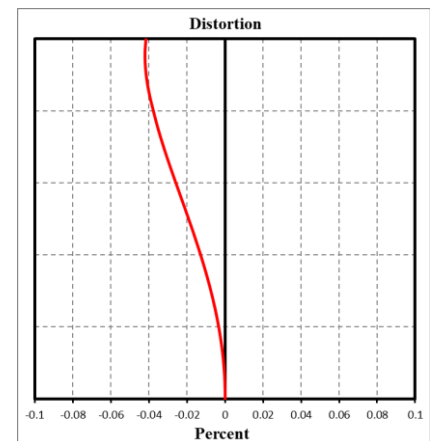
HF-P series FA Lens are optimized for machine vision light sources and sensor, with high resolution, excellent image quality, high transmittance and good stability. Featured with fixed focal length, manual aperture and compact size, it is suitable for machine vision industry applications and ideal for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



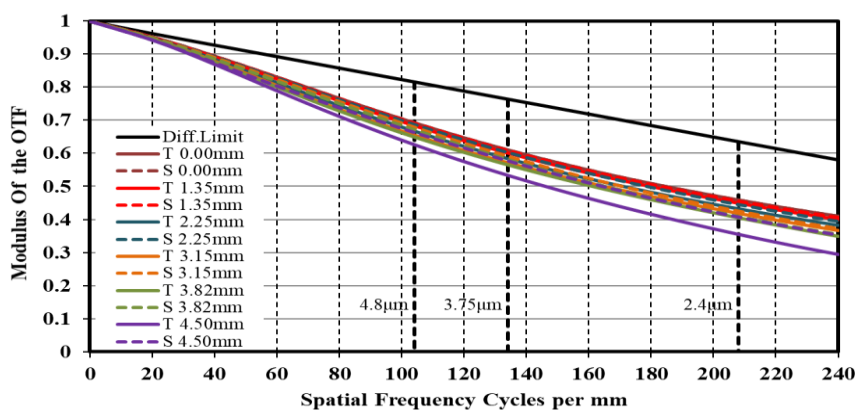
Key Features

- Ultra high resolution and consistency of image clarity
- Bigger aperture, lower distortion and higher relative illumination rate
- Achromatic optical system design, Better imaging performance with color camera
- Excellent vibration resistance performance, optical axis shifting within pixel level
- Good stability at high and low temperature
- Multilayer and broadband coating design, compatible with visible and near-infrared applications

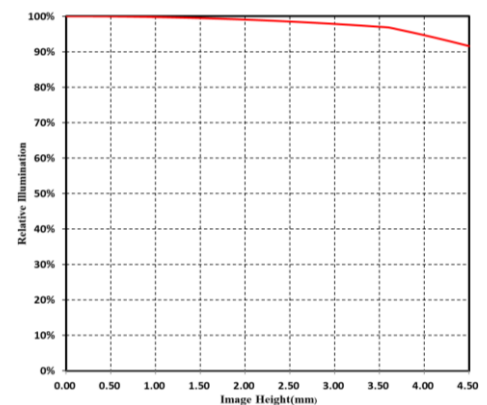
Distortion



MTF



Relative Illumination

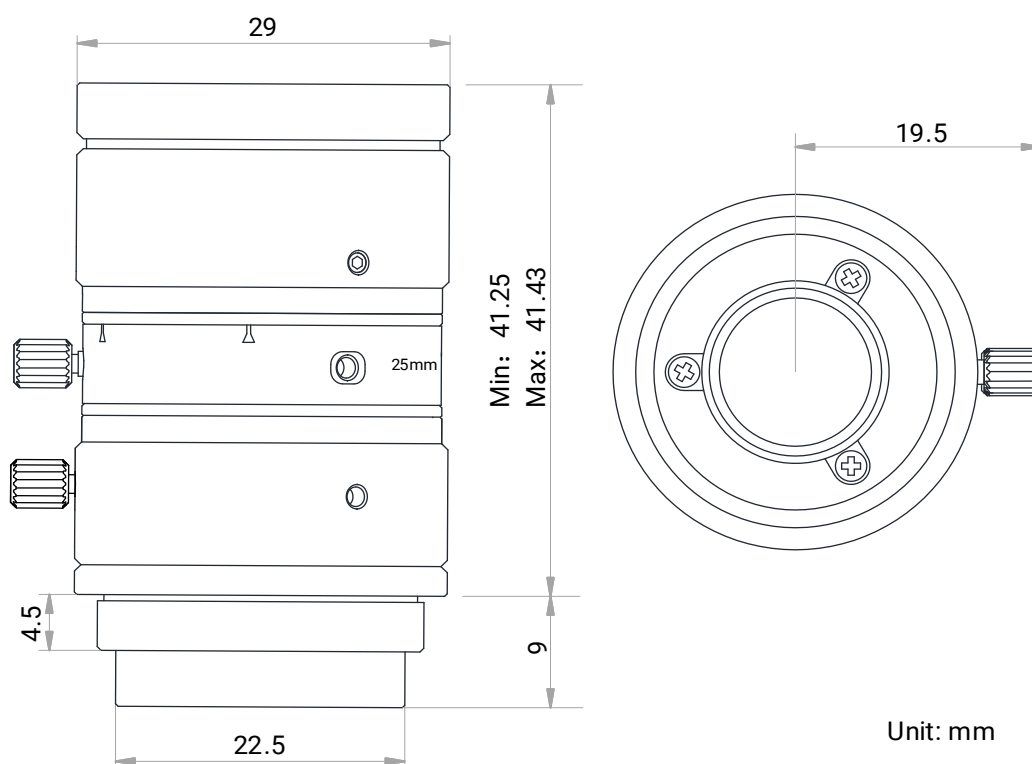


Note: The above curves are the simulate results based on F2.4, $\beta = -0.051$, WD=500 mm.

Specification

Parameter	Model	MVL-HF2524M-10MP
	Fixed focal length, Manual iris, 10MP, FA Lens	
Performance		
Focal length	25 mm	
F-number	F2.4 to F16	
Image size	Ø9 mm (1/1.8")	
Distortion	−0.01%	
Minimum object distance	0.1 m	
Field of view	D (8.96 mm): 19.67° H (7.38 mm): 16.19° V (4.92 mm): 10.85°	
Mechanical		
Iris control	Manual	
Focus control	Manual	
Filter thread	M27 × 0.5	
Mount	C-mount	
Flange back length	17.526 mm	
Dimension	Ø29 mm × 41.43 mm (Ø1.1" x 1.6")	
Weight	73.8 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)			
				1/1.8"		1/2"	
				H(7.38mm)	V(4.92mm)	H(6.22mm)	V(4.67mm)
10	near	46.1	-0.655	11.30	7.52	9.52	7.14
	far	65.9	-0.409	18.16	12.08	15.29	11.47
5	near	62.35	-0.470	15.75	10.49	13.27	9.96
	far	125.8	-0.205	36.18	24.08	30.47	22.85
2	near	80.25	-0.358	20.65	13.75	17.39	13.05
	far	305.5	-0.082	90.09	60.02	75.91	56.97
1	near	89	-0.321	23.04	15.35	19.41	14.57
	far	606	-0.041	180.19	120.09	151.85	113.99
0	100		-0.284	26.04	17.35	21.94	16.47
	150		-0.180	41.04	27.35	34.58	25.96
	200		-0.132	56.05	37.35	47.23	35.45
	250		-0.104	71.04	47.34	59.86	44.94
	300		-0.086	86.04	57.34	72.51	54.43
	350		-0.073	101.03	67.33	85.14	63.91
	400		-0.064	116.02	77.33	97.77	73.40
	450		-0.056	131.01	87.32	110.41	82.89
	500		-0.051	146.00	97.32	123.04	92.37
	550		-0.046	160.99	107.31	135.68	101.86
	600		-0.042	175.99	117.31	148.32	111.35
	650		-0.039	190.96	127.29	160.94	120.82
	700		-0.036	205.96	137.30	173.58	130.32
	800		-0.031	235.92	157.27	198.84	149.28
	900		-0.028	265.90	177.26	224.11	168.25
	1000		-0.025	295.93	197.28	249.42	187.26