

MVL-HF0824M-10MP

1/1.8" 8mm 10MP FA LENS

FA series 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

Order Model

MVL-HF0824M-10MP

Specification

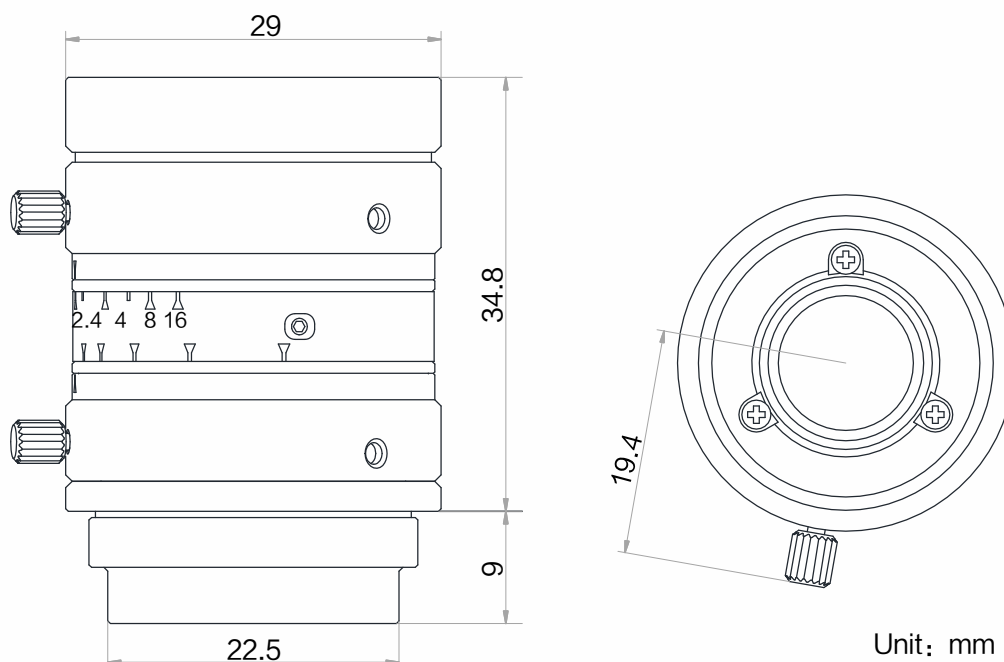
Model		MVL-HF0824M-10MP		
Parameter		Fixed focal length, Manual iris, 10MP, FA Lens		
Focal Length		8mm	Mount	C-Mount
F-Number		F2.4~F16	Flange Back Length	17.526mm
Image Size		Φ9mm(1/1.8")	Filter Thread	M27×0.5
Distortion		-0.67%	Minimum Operation Distance	0.1m
Control	Iris	Manual	Dimension	Φ29×34.8mm
	Focus	Manual		
Operating Temperature		-10~50°C	Weight	70.9g
Angle of View		1/1.8"	D (8.96mm)	58.81°
			H (7.37mm)	49.56°
			V (4.92mm)	34.04°



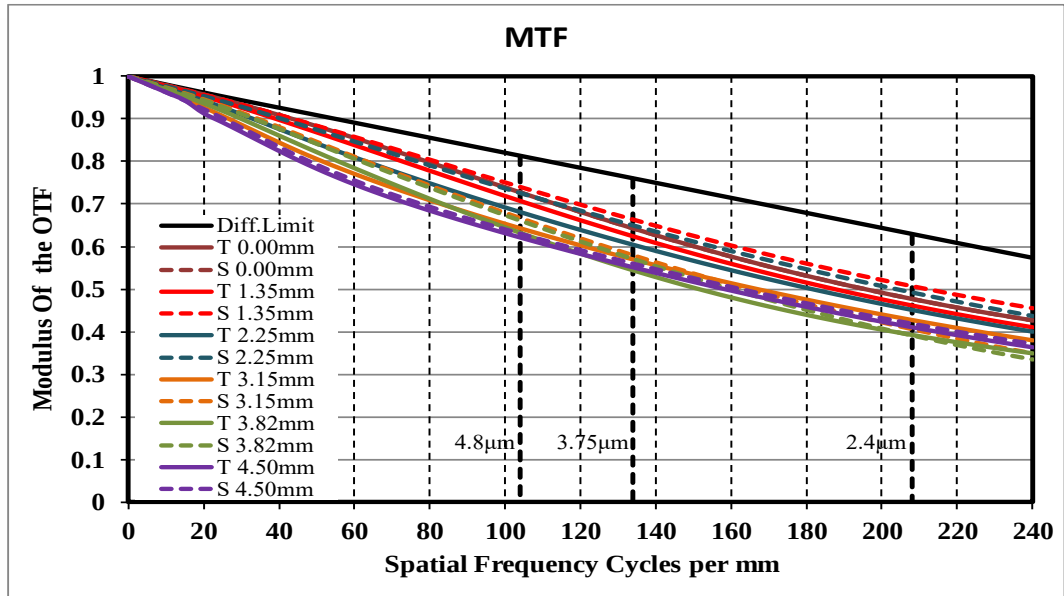
Field of View

Extension (mm)	Working Distance (mm)		Magnification	Field of View (mm)			
				1/1.8"		1/2"	
				(7.38mm×4.92mm)		(6.22mm×4.67mm)	
				H	V	H	V
0	100		-0.070	106.09	69.80	88.83	66.18
	150		-0.048	152.48	100.50	127.79	95.30
	200		-0.037	198.83	131.19	166.74	124.40
	250		-0.030	245.17	161.87	205.67	153.50
	300		-0.025	291.50	192.54	244.60	182.60
	350		-0.022	337.82	223.21	283.52	211.69
	400		-0.019	384.17	253.90	322.46	240.80
	450		-0.017	430.46	284.55	361.36	269.87
	500		-0.015	476.78	315.22	400.28	298.96
	550		-0.014	523.09	345.88	439.19	328.04
	600		-0.013	569.40	376.55	478.10	357.13
	650		-0.012	615.72	407.22	517.02	386.22
	700		-0.011	662.02	437.87	555.92	415.30
	800		-0.010	754.64	499.20	633.75	473.47
	900		-0.009	847.28	560.54	711.58	531.65
	1000		-0.008	939.91	621.87	789.42	589.82
1	near	28.6	-0.19	39.17	25.54	32.63	24.20
	far	52.65	-0.12	61.37	40.19	51.25	38.09
2	near	12.68	-0.30	24.17	15.65	20.06	14.82
	far	20.12	-0.24	31.12	20.21	25.87	17.15

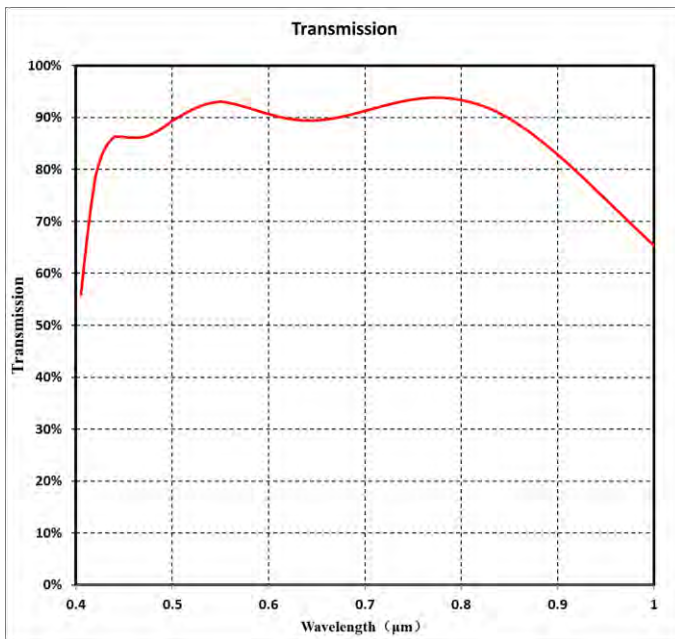
Dimension



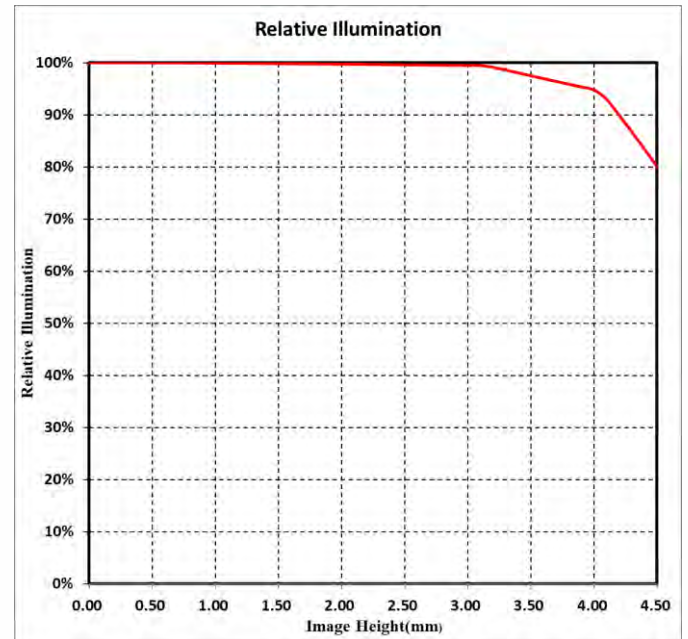
MTF



Transmission



Relative Illumination



Note: The above curves are the simulate results based on F2.4, $\beta=-0.019$, WD=400 mm.

HIKROBOT

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