

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

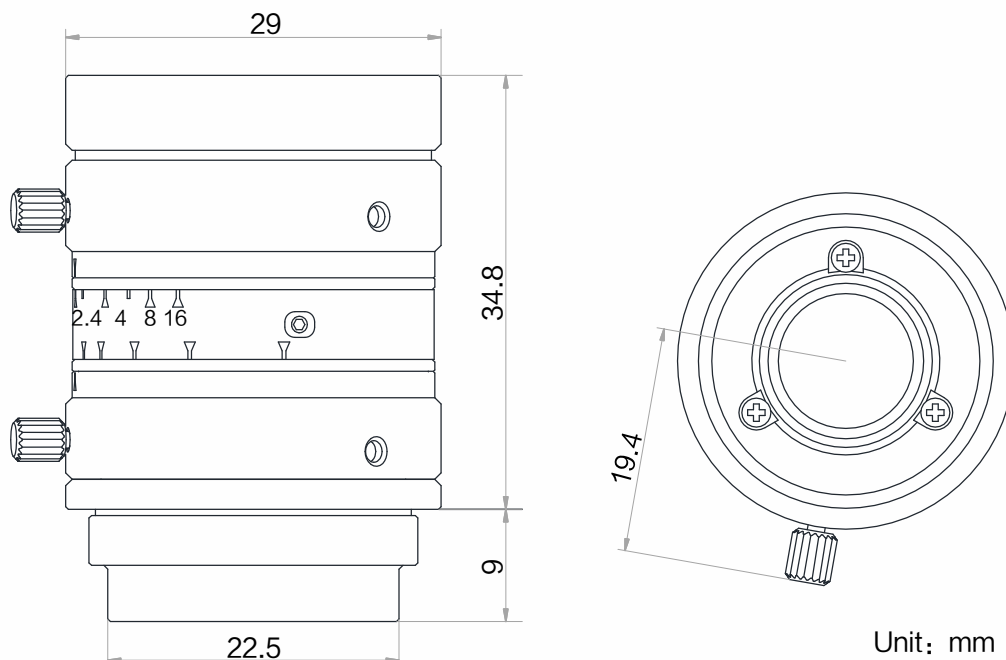
Model		MVL-HF0824M-10MP	
Parameter		Fixed focal length, Manual iris, 10MP, FA Lens	
Focal Length		8mm	C-Mount
F-Number		F2.4~F16	17.526mm
Image Size		Φ9mm(1/1.8")	M27×0.5
Distortion		-0.67%	0.1m
Control	Iris	Manual	Dimension
	Focus	Manual	
Operating Temperature		-10~50°C	70.9g
Angle of View		D (8.96mm)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



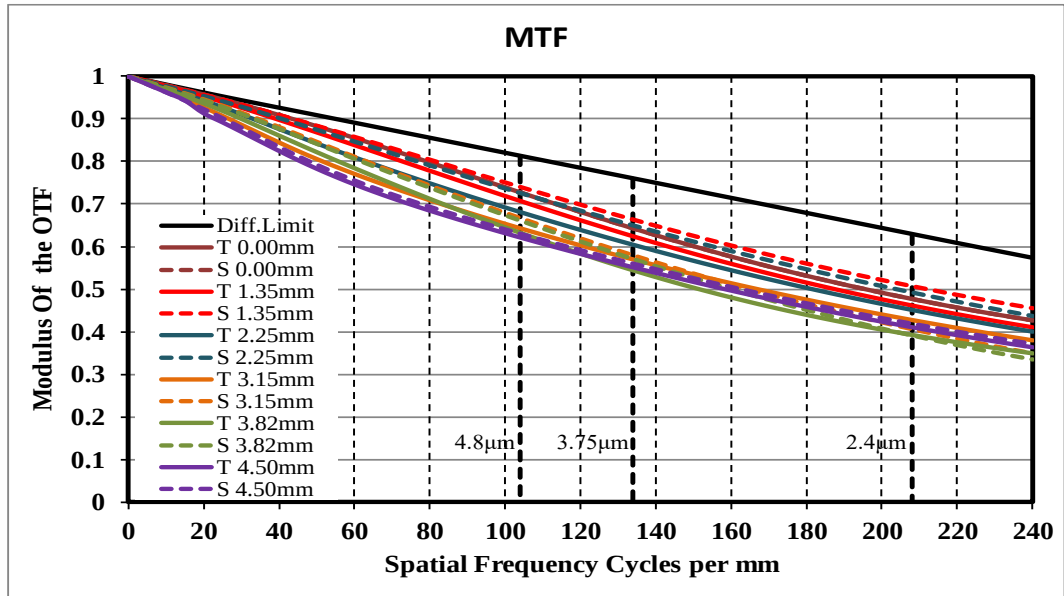
Field of View

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

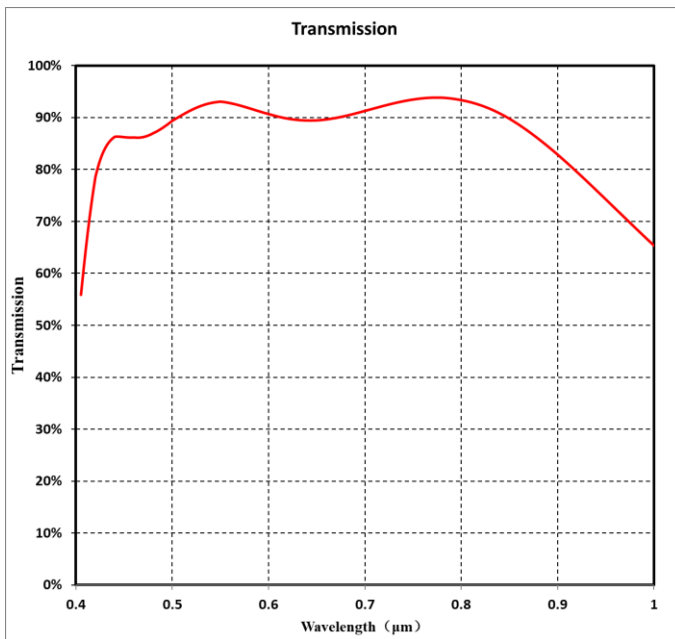
Dimension



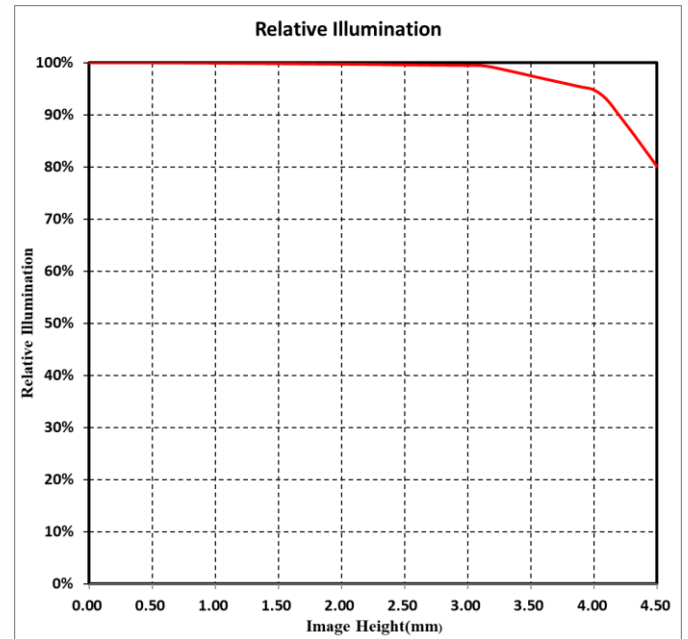
MTF



Transmission



Relative Illumination



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

HIKROBOT

Hangzhou Hikrobot Technology Co., Ltd.
No.399 Danfeng Road, Binjiang District, Hangzhou 310051, China.
en.hikrobotics.com

Copyright Hikrobot

Hangzhou Hikrobot Technology Co., Ltd. All Rights Reserved. Hangzhou Hikrobot Technology does not tolerate any infringement. Any organization or individual may not imitate or reproduce in whole or in part of the content. The data herein is based on Hikrobot's internal evaluation. Actual data may vary depending on specific configuration and operating condition. The information herein is subject to change without notice All the content has been checked conscientiously. Nevertheless, Hikrobot shall not be liable to damages resulting from errors, inconsistencies or omissions.