HIKROBOT

MVL-MF3518M-5MPE

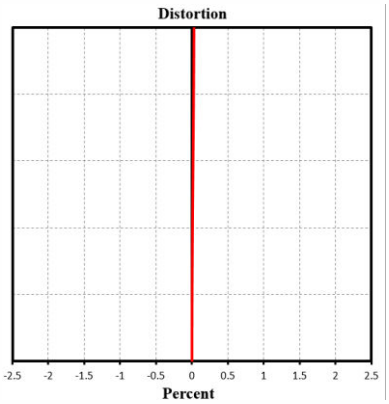
2/3” 35mm 5MP FA LENS

MF-E 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.

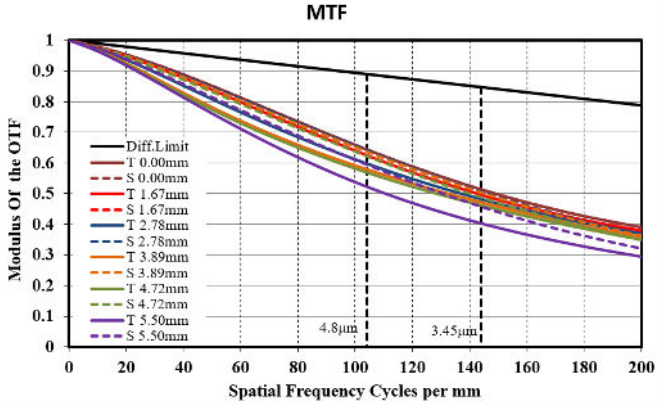
Key Features

- High resolution and consistency of image clarity
- Lower distortion and higher relative illumination rate
- Achromatic optical system design, Better imaging performance with color camera
- Excellent proformance at high and low temperature
- Good optical performance at ultra-short working distance

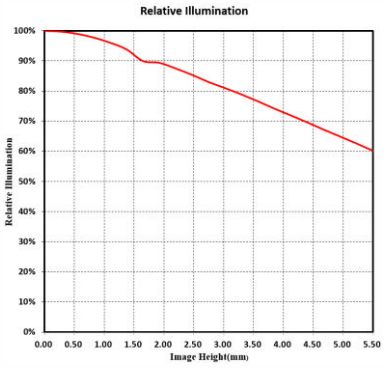
Distortion



MTF



Relative Illumination

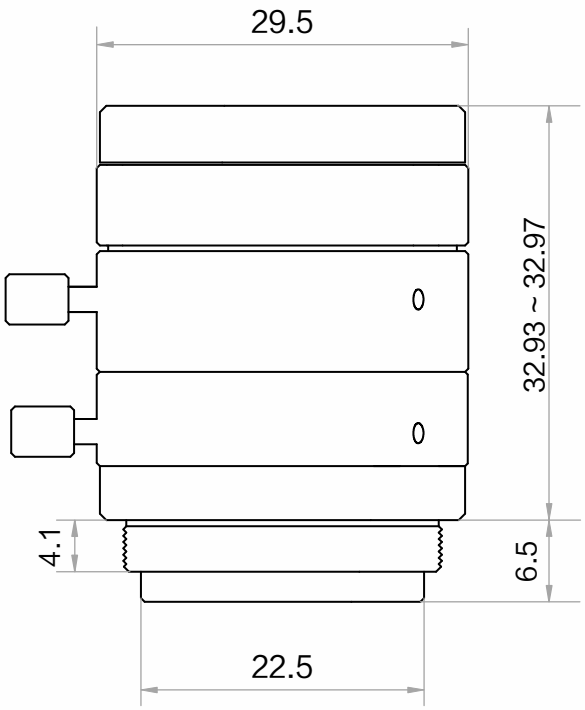


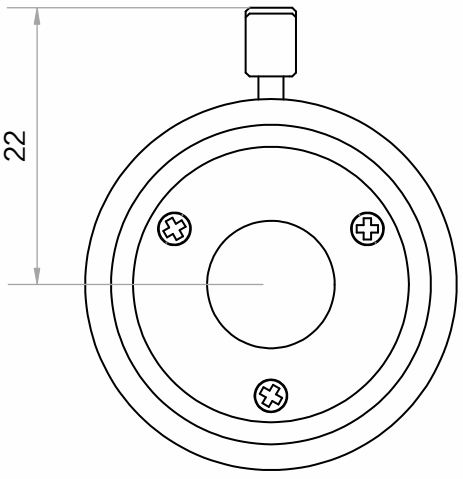
Note: The above curves are the simulate results based on F1.8, β=-0.125, WD=300 mm

Specification

Parameter \ Model	MVL-MF3518M-5MPE
	Fixed focal length, Manual iris, 5MP, FA Lens
Performance	
Focal Length	35 mm
F-Number	F1.8 ~ F16
Image Size	Φ11 mm (2/3'')
Distortion	0.02%
Minimum Operation Distance	0.25 m
Field of View	D（11.1 mm）：17.46° H（8.45 mm）：13.43° V（7.07 mm）：11.26°
Mechanical	
Iris Control	Manual
Focus Control	Manual
Mount	C-Mount
Flange Back Length	17.526 mm
Dimension	Φ29.5 × 32.97 mm
Weight	62.8 g
Temperature	-10 ~ 50℃
General	
Certification	RoHS2.0

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)
30	near	52.9	-1.044	8.1	6.8	7.1	4.7	5.9	4.5
	far	60.3	-0.856	9.9	8.3	8.6	5.8	7.3	5.5
25	near	58.1	-0.904	9.4	7.8	8.2	5.4	6.9	5.2
	far	68.4	-0.715	11.9	9.9	10.4	6.9	8.7	6.5
20	near	65.3	-0.762	11.1	9.3	9.7	6.5	8.2	6.1
	far	80.6	-0.572	14.8	12.4	12.9	8.6	10.9	8.2
15	near	75.7	-0.621	13.6	11.4	11.9	7.9	10.0	7.5
	far	100.8	-0.431	19.7	16.5	17.2	11.5	14.5	10.9
10	near	92.4	-0.480	17.7	14.8	15.4	10.3	13.0	9.8
	far	141.2	-0.288	29.4	24.6	25.7	17.1	21.7	16.3
5	near	123.2	-0.338	25.1	21.0	21.9	14.6	18.5	13.9
	far	262.7	-0.144	58.7	49.1	51.2	34.2	43.2	32.4
2	near	158.8	-0.252	33.7	28.2	29.4	19.6	24.8	18.6
	far	629.6	-0.057	146.7	122.8	128.2	85.5	108.1	81.2
1	near	176.7	-0.223	38.0	31.8	33.2	22.1	28.0	21.0
	far	1247.4	-0.029	295.0	246.9	257.7	171.9	217.3	163.2
0	200		-0.194	43.6	36.5	38.1	25.4	32.9	24.7
	250		-0.152	55.6	46.5	48.3	35.1	42.1	31.5
	300		-0.125	67.6	56.6	61.0	45.8	54.9	41.1
	350		-0.106	80.1	66.5	71.2	53.4	64.0	48.0
	400		-0.088	100.6	76.8	81.4	61.0	73.1	54.9
	450		-0.078	113.1	86.9	91.5	68.7	82.3	61.7
	500		-0.070	125.7	97.6	101.7	76.3	91.4	68.6
	550		-0.064	138.3	106.5	111.9	83.9	100.6	75.4
	600		-0.058	150.9	117.2	122.1	91.5	109.7	82.3
	650		-0.054	163.4	126.9	132.2	99.2	118.9	89.1
	700		-0.050	176.0	137.3	142.4	106.8	128.0	96.0
	800		-0.044	201.1	157.5	162.7	122.1	146.3	109.7
	900		-0.039	226.3	175.7	183.1	137.3	164.6	123.4
	1000		-0.036	235.5	197.2	203.4	152.6	182.9	137.1

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

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