

MVL-KF5028M-12MP
1.1" 50mm 12MP FA LENS

FA series 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 excellent image uniformity
- Low distortion to ensure measurement accuracy
- Maximum image circle of 1.1"
- Easy device integration with compact structure

Order Model

MVL-KF5028M-12MP

Specification

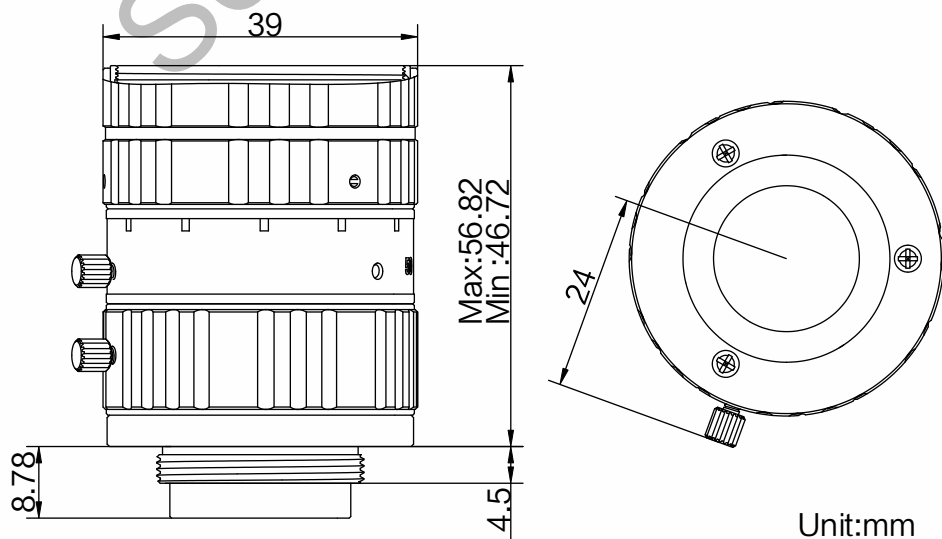
Model		MVL-KF5028M-12MP		
Parameter		Fixed focal length, Manual iris, 12MP, FA Lens		
Focal Length		50mm	Mount	C-Mount
F-Number		F2.8~F16	Flange Back Length	17.526mm
Image Size		Φ17.6mm(1.1")	Filter Thread	M35.5*0.5
Optical Distortion		-0.05%	Minimum Operation Distance	0.3m
Control	Iris	Manual	Dimension	Φ39×46.72mm
	Focus	Manual		
Operating Temperature		-10~50°C	Weight	134g
Angle of View		1.1"	D (17.6mm)	18.9°
			H (14.08mm)	15.1°
			V (10.56mm)	11.2°



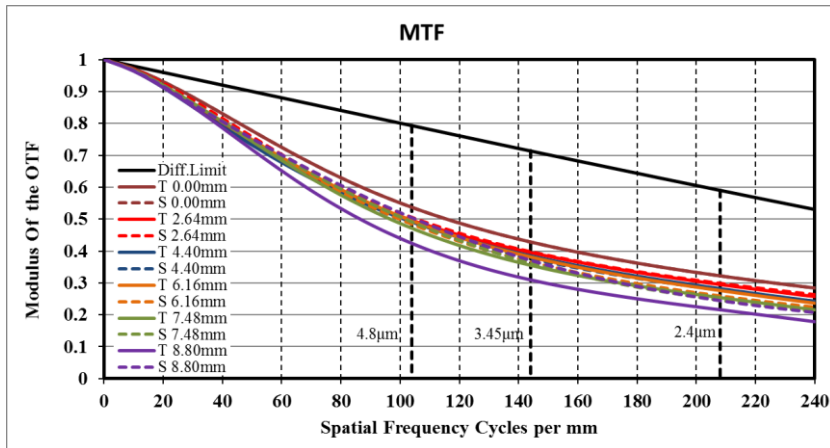
Field of View

Working Distance (mm)	Magnification	Extension (mm)	Field of View (mm)					
			1.1" (14.14mm×10.35mm)		1" (12.45mm×9.83mm)		2/3" (8.45mm×7.07mm)	
			H	V	H	V	H	V
50	-1.179	48	12.00	8.78	10.56	8.34	7.17	6.00
75	-0.750	27	18.86	13.81	16.61	13.11	11.27	9.43
100	-0.546	18	25.88	18.94	22.79	17.99	15.47	12.94
150	-0.355	9	39.82	29.14	35.06	27.68	23.79	19.91
200	-0.262	5	53.90	39.46	47.46	37.47	32.21	26.95
250	-0.209		67.73	49.58	59.64	47.08	40.48	33.87
300	-0.173		81.57	59.71	71.82	56.70	48.75	40.79
350	-0.147		96.23	70.44	84.73	66.90	57.51	48.12
400	-0.128		110.90	81.17	97.64	77.09	66.27	55.45
450	-0.113		125.56	91.91	110.55	87.29	75.04	62.78
500	-0.101		140.23	102.64	123.47	97.48	83.80	70.12
550	-0.091		154.90	113.38	136.39	107.68	92.57	77.45
600	-0.083		169.57	124.12	149.30	117.88	101.33	84.79
650	-0.077		184.24	134.86	162.22	128.08	110.10	92.12
700	-0.071		198.91	145.59	175.13	138.27	118.87	99.46
750	-0.066		213.58	156.33	188.05	148.47	127.63	106.79
800	-0.062		228.25	167.07	200.97	158.67	136.40	114.13
850	-0.058		242.92	177.81	213.88	168.87	145.17	121.46
900	-0.055		257.59	188.54	226.80	179.07	153.93	128.80
950	-0.052		272.26	199.28	239.72	189.27	162.70	136.13
1000	-0.049		286.93	210.02	252.63	199.46	171.47	143.47

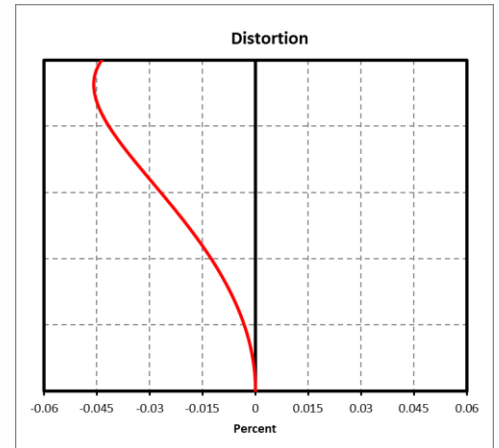
Dimension



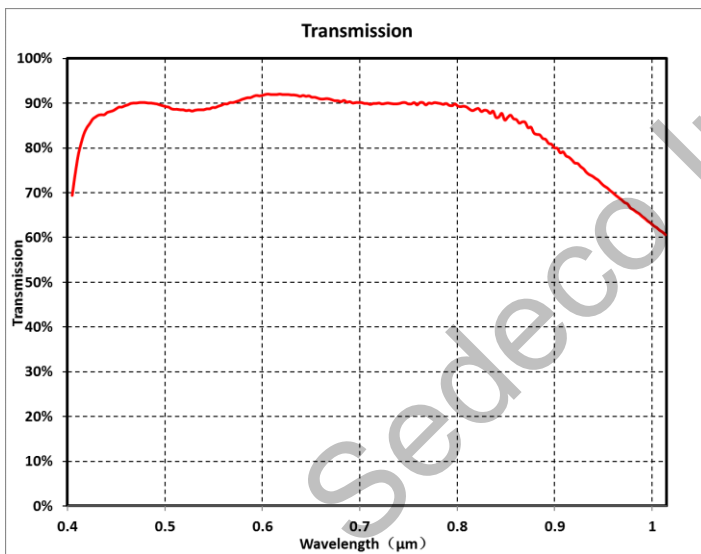
MTF



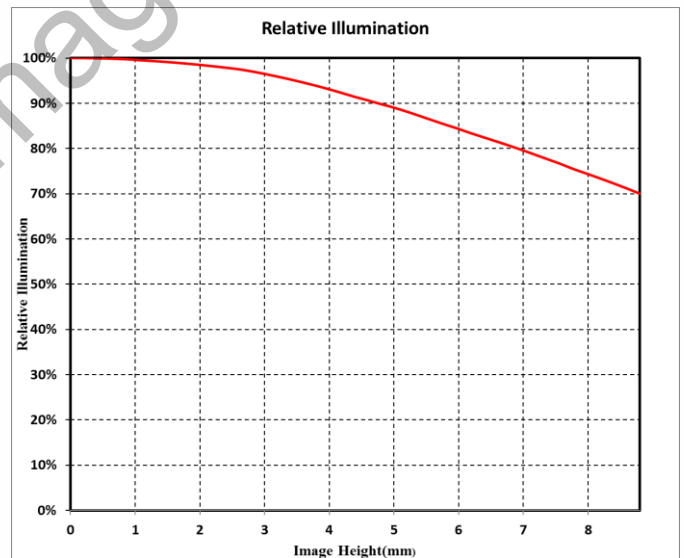
Distortion



Transmission



Relative Illumination



Note: The above curves are the simulate results based on F2.8, $\beta=-0.128$, WD=400 mm.

HIKROBOT

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

SEDECO
IMAGING

Germany, Austria, Switzerland
Sedeco Imaging GmbH
Unterer Dammweg 12
76149 Karlsruhe
Germany
T. +49 721 5604 7980
info@sedeco-imaging.com

BeNeLux
Sedeco Imaging B.V.
Trasmolenlaan 12
3447 GZ Woerden
the Netherlands
T. +31 348 749110
info@sedeco-imaging.nl

www.sedeco-imaging.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.