SEDECO IMAGING

HIKROBOT

MVL-KF1228M-12MP

1.1” 12mm 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-KF1228M-12MP

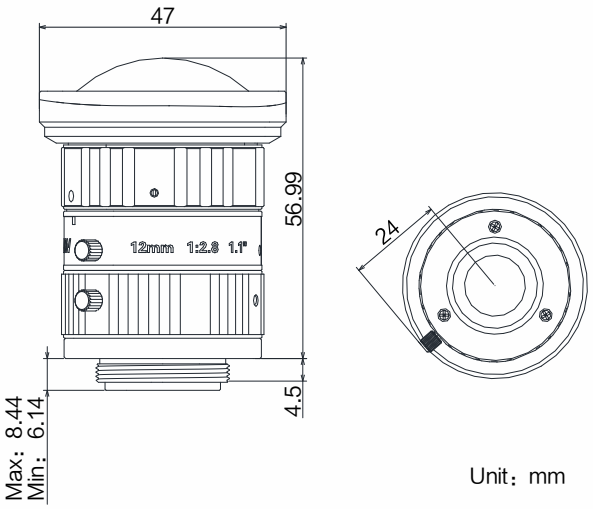
Specification

Model / Parameter		MVL-KF1228M-12MP Fixed focal length, Manual iris, 12MP, FA Lens		
Focal Length		12mm	Mount	C-Mount
F-Number		F2.8~F16	Flange Back Length	17.526mm
Image Size		Φ17.6mm(1.1’’)	Filter Thread	/
Optical Distortion		-1.79%	Minimum Operation Distance	0.1m
Control	Iris	Manual	Dimension	Φ47×56.99mm
	Focus	Manual		
Operating Temperature		-10~50℃	Weight	186g
Angle of View		1.1”	D（17.6mm）	70.5°
			H（14.08mm）	59.8°
			V（10.56mm）	46.2°

Field of View

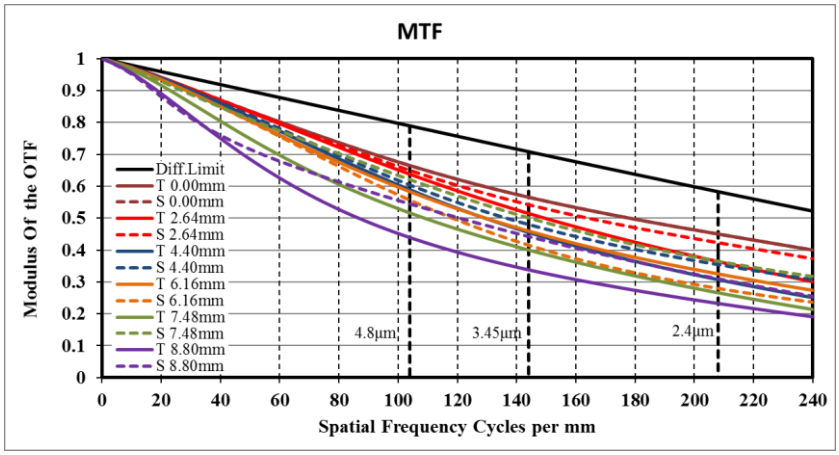
Working Distance (mm)	Magnification	Extension (mm)	Field of View (mm)					
			1.1'' (14.14mm×10.35mm)		1'' (12.45mm×9.83mm)		2/3'' (8.45mm×7.07mm)	
			H	V	H	V	H	V
25	-0.256	2	58.39	41.75	50.84	39.54	33.76	28.08
50	-0.169	1	87.61	62.98	76.49	59.68	51.02	42.49
75	-0.126	1	116.61	84.19	102.04	79.82	68.31	56.92
100	-0.100		145.95	105.37	127.71	99.90	85.49	71.25
150	-0.071		203.80	147.63	178.63	140.01	119.92	100.00
200	-0.055		261.51	189.80	229.44	180.04	154.27	128.69
250	-0.045		319.15	231.94	280.20	220.04	188.60	157.37
300	-0.038		376.77	274.05	330.93	260.01	222.92	186.03
350	-0.033		434.36	316.16	381.64	299.98	257.22	214.69
400	-0.029		491.94	358.25	432.34	339.94	291.52	243.34
450	-0.026		549.52	400.34	483.04	379.89	325.81	271.99
500	-0.024		607.09	442.43	533.74	419.84	360.11	300.63
550	-0.022		664.65	484.51	584.43	459.79	394.40	329.28
600	-0.020		722.21	526.59	635.11	499.74	428.69	357.92
650	-0.018		779.77	568.67	685.80	539.68	462.97	386.56
700	-0.017		837.33	610.75	736.48	579.63	497.26	415.21
750	-0.016		894.89	652.83	787.16	619.57	531.54	443.85
800	-0.015		952.44	694.90	837.84	659.51	565.83	472.49
850	-0.014		1010.00	736.98	888.52	699.45	600.11	501.13
900	-0.013		1067.55	779.06	939.20	739.39	634.40	529.76
1000	-0.012		1182.57	863.25	1040.56	819.32	703.02	587.09

Dimension

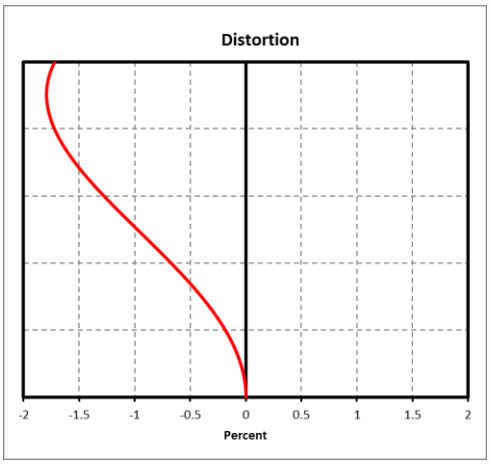


Unit：mm

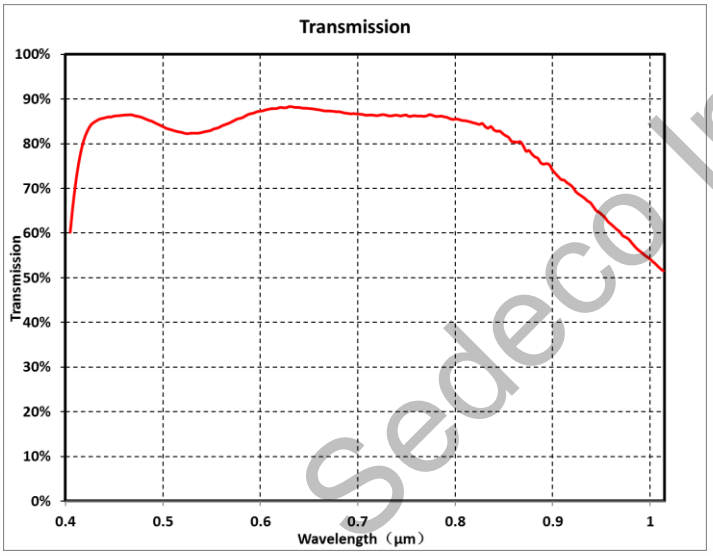
MTF



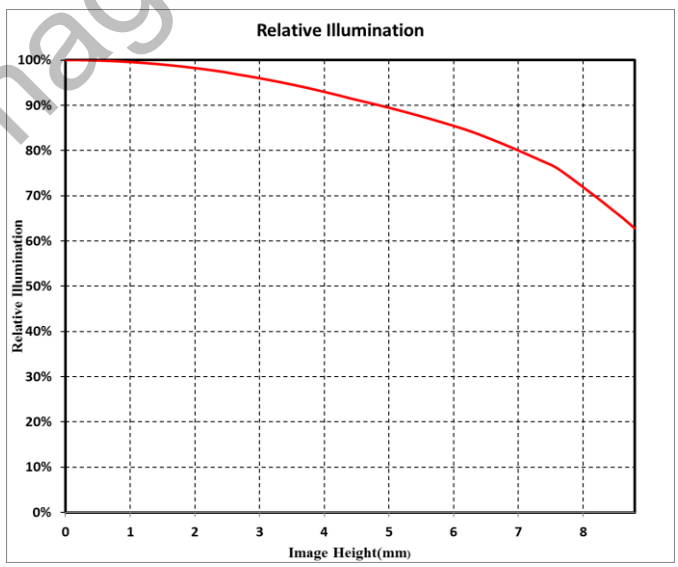
Distortion



Transmission



Relative Illumination



Note：The above curves are the simulate results based on F2.8, β=-0.038, WD=300 mm.

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