HIKROBOT

MVL-KF1628M-12MP

1.1” 16mm 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-KF1628M-12MP

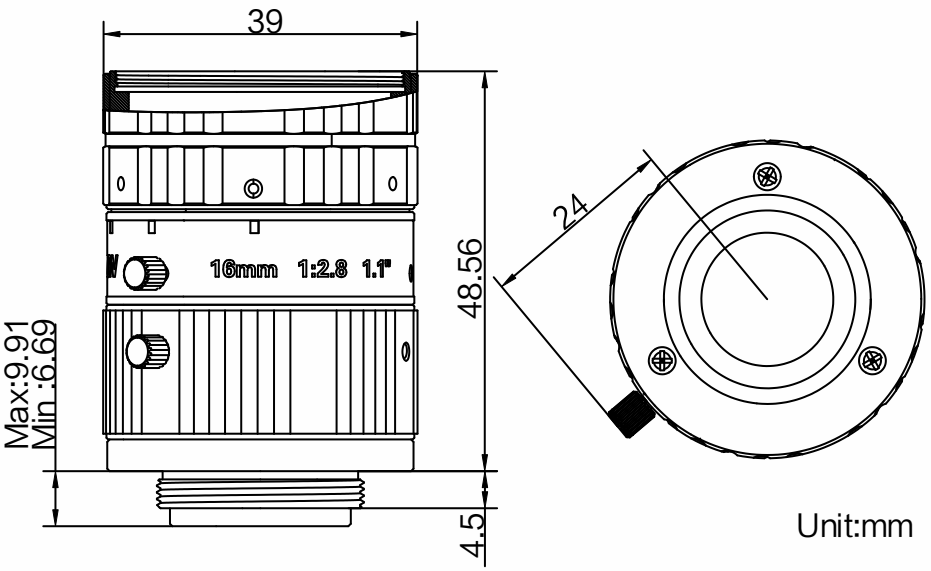
Specification

Model / Parameter		MVL-KF1628M-12MP Fixed focal length, Manual iris, 12MP, FA Lens		
Focal Length		16mm	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		-1.30%	Minimum Operation Distance	0.1m
Control	Iris	Manual	Dimension	Φ39×48.56mm
	Focus	Manual		
Operating Temperature		-10~50℃	Weight	146g
Angle of View		1.1”	D（17.6mm）	54.8°
			H（14.08mm）	44.9°
			V（10.56mm）	33.9°

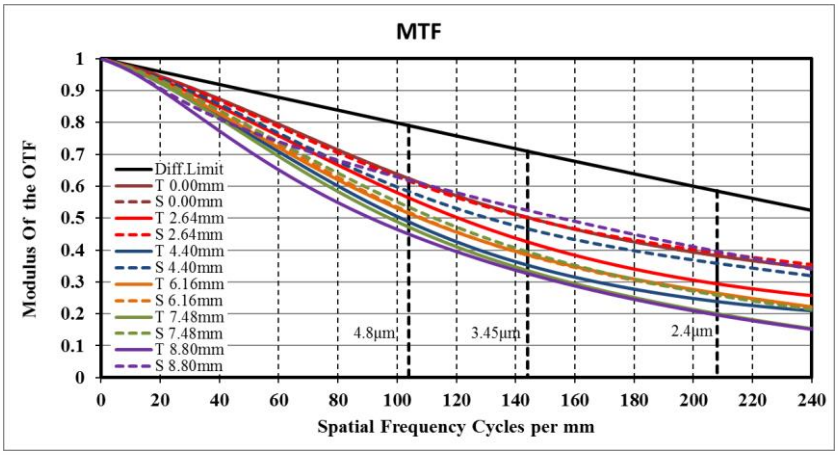
Field of View

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	-0.396	5	36.90	26.63	32.27	25.25	21.62	18.03
50	-0.246	2	59.25	42.83	51.86	40.62	34.79	29.02
75	-0.178	1	81.82	59.24	71.67	56.19	48.14	40.17
100	-0.139		104.30	75.52	91.37	71.63	61.38	51.21
150	-0.097		149.36	108.43	131.02	102.88	88.21	73.64
200	-0.074		194.17	141.18	170.45	133.96	114.91	95.95
250	-0.060		238.86	173.85	209.79	164.99	141.55	118.23
300	-0.051		283.51	206.49	249.09	195.97	168.17	140.48
350	-0.044		328.12	239.10	288.36	226.94	194.76	162.71
400	-0.038		372.71	271.70	327.61	257.89	221.35	184.94
450	-0.034		417.29	304.29	366.85	288.83	247.93	207.16
500	-0.031		461.86	336.88	406.08	319.77	274.50	229.37
550	-0.028		506.42	369.46	445.31	350.71	301.07	251.58
600	-0.026		550.98	402.03	484.53	381.64	327.64	273.79
650	-0.024		595.54	434.61	523.75	412.56	354.20	296.00
700	-0.022		640.09	467.18	562.96	443.49	380.77	318.21
750	-0.021		684.64	499.75	602.18	474.41	407.33	340.41
800	-0.020		729.19	532.32	641.39	505.33	433.89	362.62
850	-0.018		773.73	564.88	680.60	536.25	460.45	384.82
900	-0.017		818.28	597.45	719.81	567.17	487.01	407.03
1000	-0.016		907.37	662.58	798.22	629.01	540.12	451.43

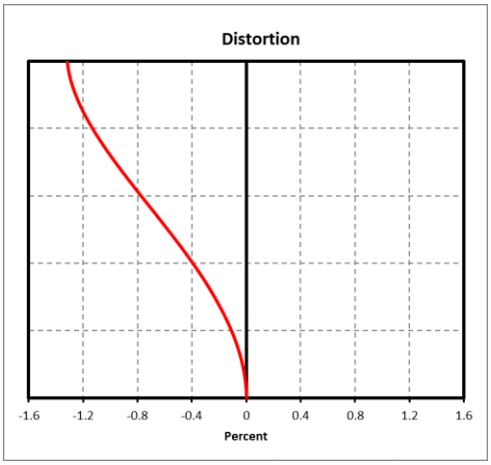
Dimension



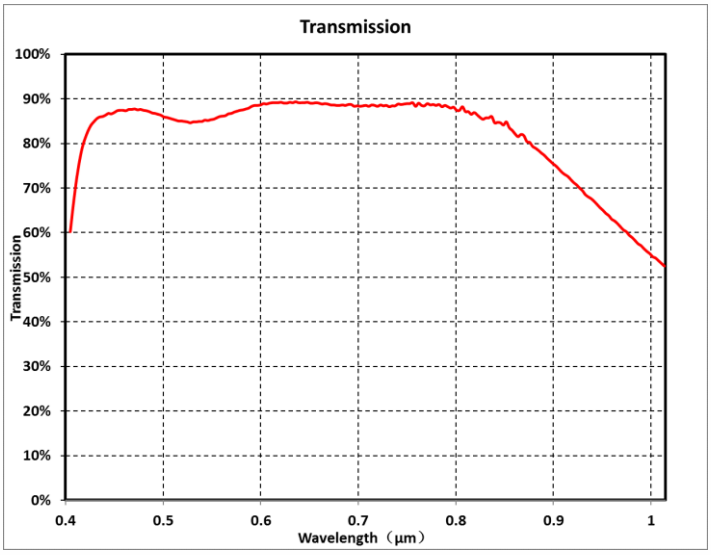
MTF



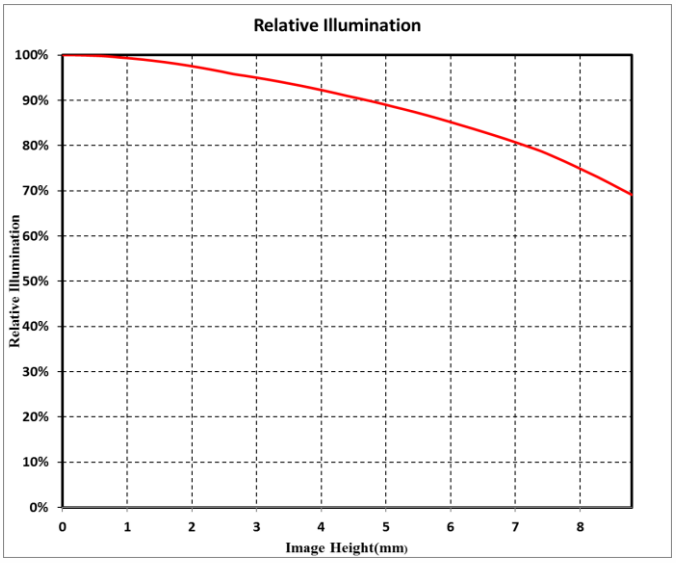
Distortion



Transmission



Relative Illumination



Note：The above curves are the simulate results based on F2.8, β=-0.038, WD=400 mm.

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