



# MVL-KF1628M-12MP 1.1" 16mm 12MP FA LENS

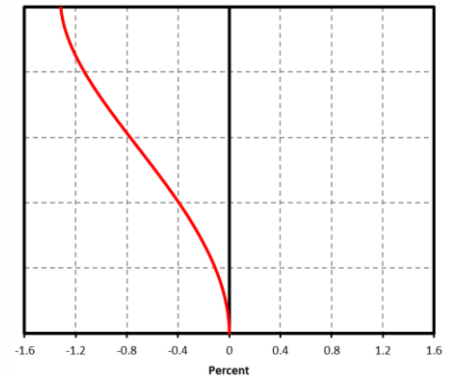
KF series FA Lens are optimized for machine vision light sources and sensors, with high resolution, excellent image uniformity, high transmittance and good stability. Featured with fixed focal length, manual aperture and compact size, it is suitable for machine vision industry applications.



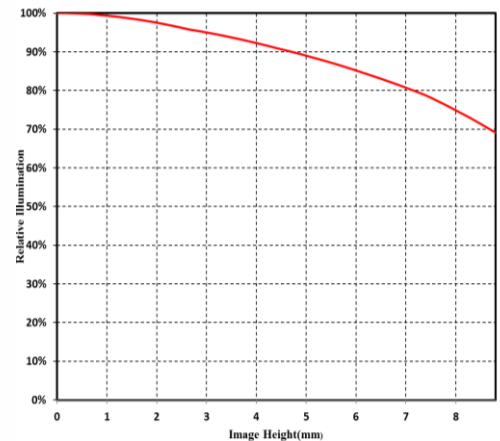
## Key Features

- High resolution, high definition of the whole image
- Low distortion, high illumination relative
- Excellent mechanism design, improve the shock resistance and high/low temperature stability
- Multilayer wide band coating, ensuring high transmittance of visible and near infrared light
- Support ultra short working distance, maintaining excellent optical properties at different object distances

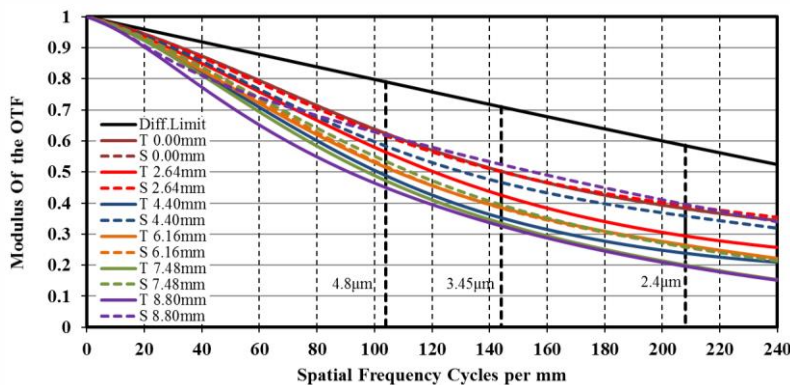
## Distortion



## Relative Illumination



## MTF



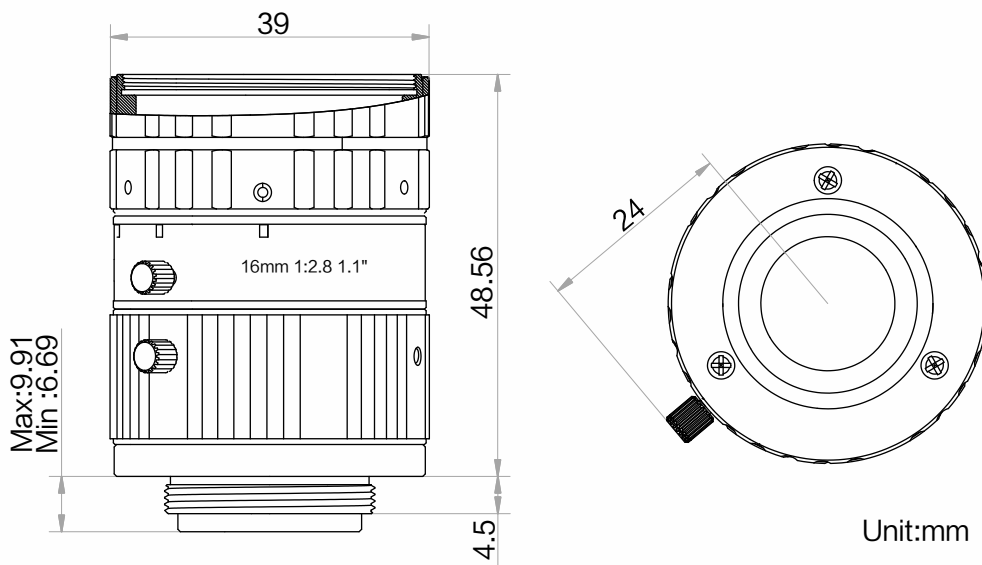
Note: The above curves are the simulate results based on F2.8,  $\beta=-0.038$ , WD=400 mm.



## Specification

Model	MVL-KF1628M-12MP
Parameter	Fixed focal length, Manual iris, 12MP, FA Lens
<b>Performance</b>	
Focal Length	16 mm
F-Number	F2.8 ~ F16
Image Size	Φ17.6 mm(1.1")
Optical Distortion	-1.30%
Minimum Operation Distance	0.1 m
Field of View	D (17.52mm) : 54.8° H (14.14mm) : 44.9° V (10.35mm) : 33.9°
<b>Mechanical</b>	
Iris Control	Manual
Focus Control	Manual
Filter Thread	M35.5 × 0.5
Mount	C-Mount
Flange Back Length	17.526 mm
Dimension	Φ39 × 48.56 mm
Weight	146 g
Temperature	-10 ~ 50°C
<b>General</b>	
Certification	RoHS2.0

## Dimension



## Field of View

Extension (mm)	Working Distance (mm)	Magnification	Field of View (mm)					
			1.1"		1"		2/3"	
			H(14.14mm)	V(10.35mm)	H(12.45mm)	V(9.83mm)	H(8.45mm)	V(7.07mm)
5	25	-0.396	36.90	26.63	32.27	25.25	21.62	18.03
2	50	-0.246	59.25	42.83	51.86	40.62	34.79	29.02
1	75	-0.178	81.82	59.24	71.67	56.19	48.14	40.17
0	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	

Distribution Partner:



**SCORPION  
VISION**