

MVL-KF1628M-12MP

1.1" 16mm 12MP FA LENS

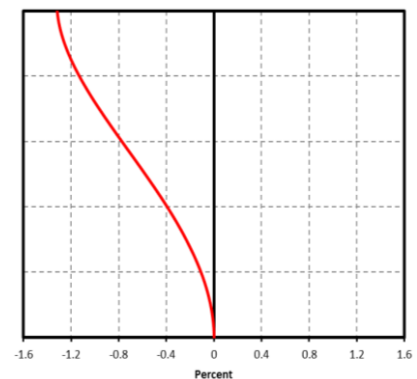
KF series FA Lens are optimized for machine vision light sources and sensors, with high resolution, excellent image uniformity, high transmittance and good stability. Featured with fixed focal length, manual aperture and compact size, it is suitable for machine vision industry applications.



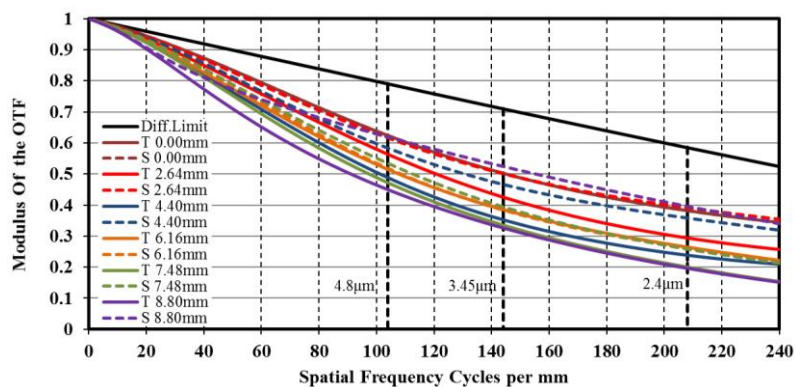
Key Features

- High resolution, high definition of the whole image
- Low distortion, high illumination relative
- Maximum image circle of 1.1"
- Support ultra-short working distance, maintaining excellent optical properties at different object distances

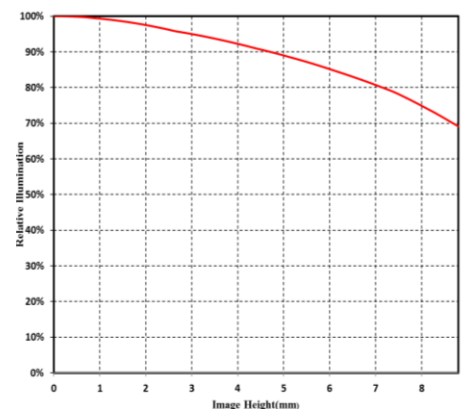
Distortion



MTF



Relative Illumination



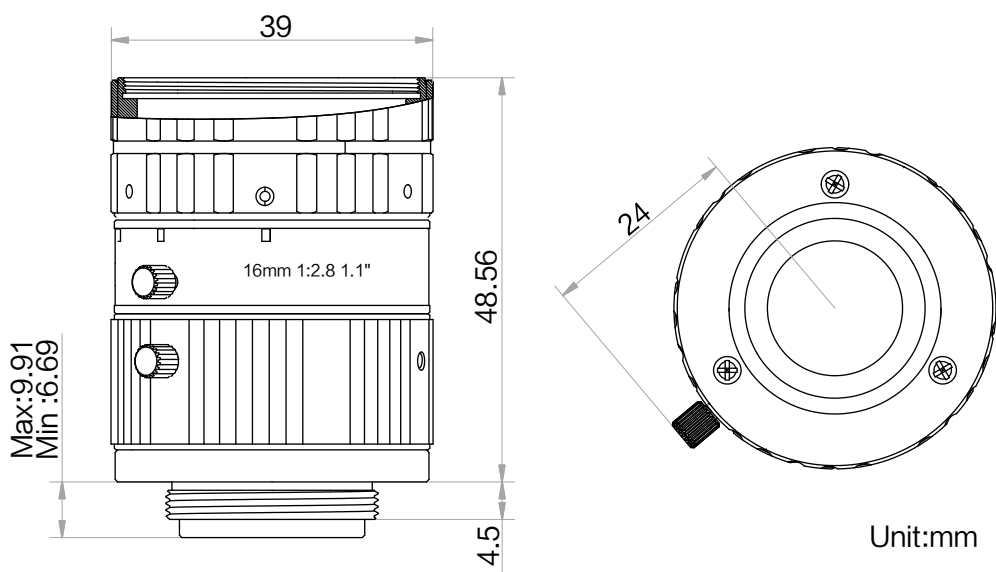
Note: The above curves are the simulate results based on F2.8, $\beta=-0.038$, WD=400 mm.



Specification

Parameter	Model	MVL-KF1628M-12MP
	Fixed focal length, Manual iris, 12MP, FA Lens	
Performance		
Focal Length	16 mm	
F-Number	F2.8 ~ F16	
Image Size	Φ17.6 mm(1.1")	
Optical Distortion	-1.30%	
Minimum Object Distance	0.1 m	
Field of View	D (17.52mm): 54.8° H (14.14mm): 44.9° V (10.35mm): 33.9°	
Mechanical		
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	
General		
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



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