

# MVL-KF1228M-12MPE

## 1.1" 12mm 12MP FA LENS

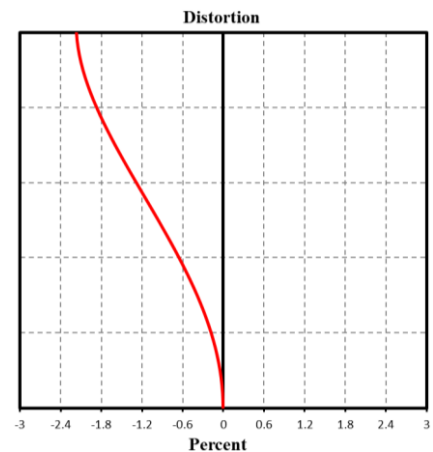
KF-E series FA Lens are optimized for machine vision light sources and sensor, with high resolution, excellent image quality, high transmittance and good stability. Featured with fixed focal length, manual aperture and compact size, it is suitable for machine vision industry applications and ideal for industrial cameras.



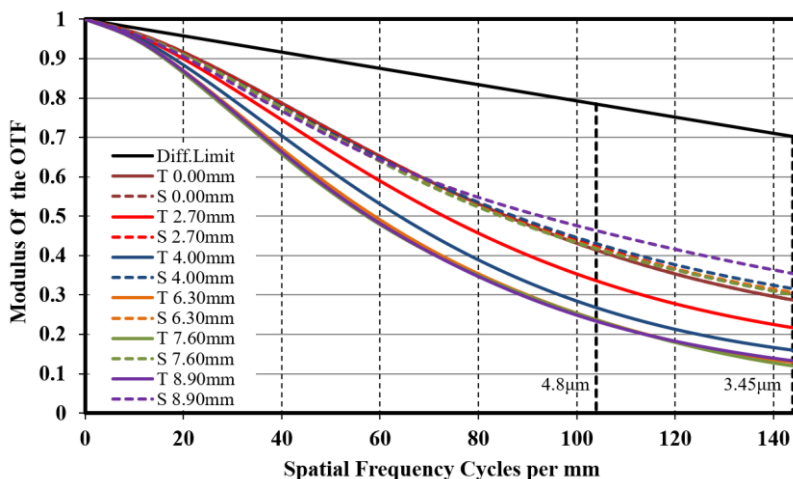
### Key Features

- Ultra high resolution and consistency of image clarity
- Lower distortion
- Super high image peripheral brightness ratio
- Excellent optical properties are maintained at different object distances

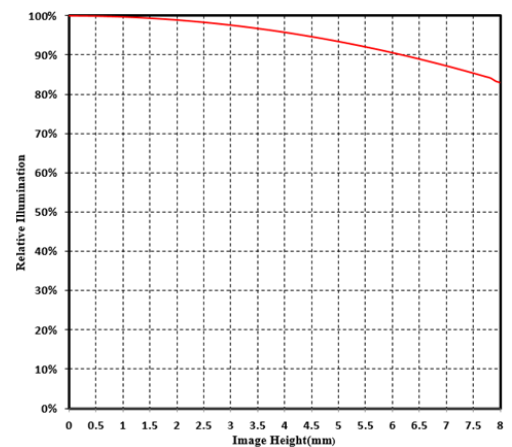
### Distortion



### MTF



### Relative Illumination



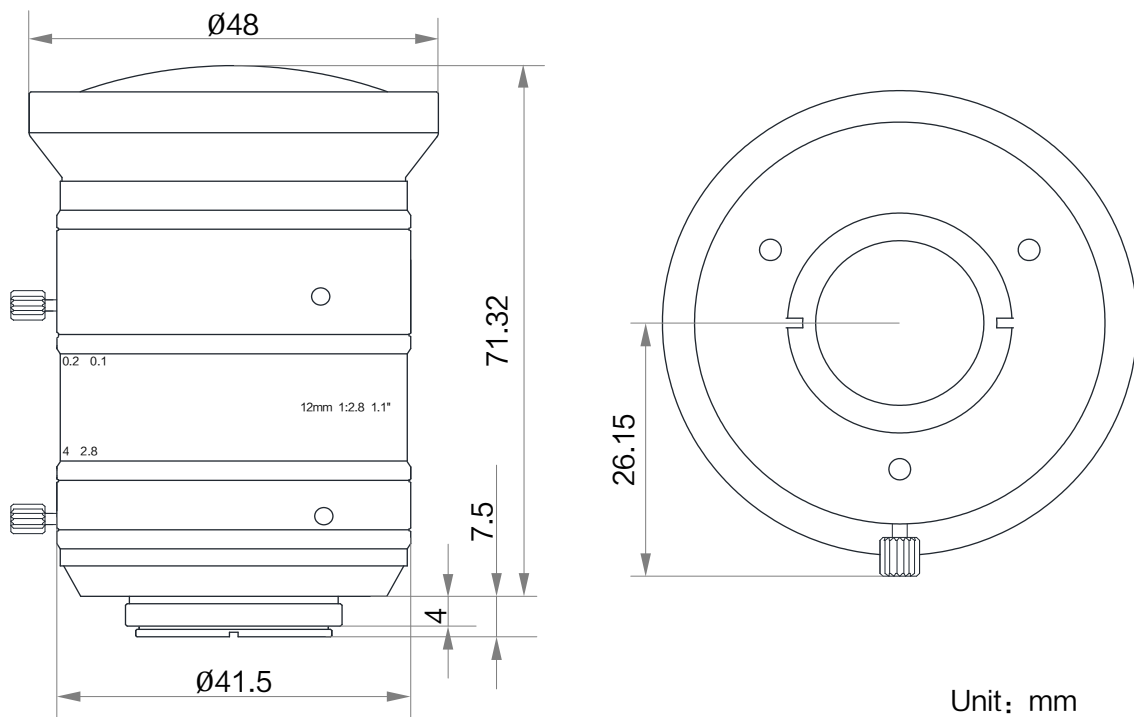
Note: The above curves are the simulate results based on F2.8,  $\beta=-0.024$ , WD=500 mm.



## Specification

Parameter	Model	MVL-KF1228M-12MPE
		Fixed focal length, Manual iris, 12MP, FA lens
<b>Performance</b>		
Focal Length		12 mm
F-Number		F2.8 ~ F22
Image Size		Φ17.6 mm(1.1")
Distortion		1.5%
Minimum Object Distance		0.1 m
Field of View		D (17.52mm): 66.7° H (14.14mm): 57° V (10.35mm): 45°
<b>Mechanical</b>		
Iris Control		Manual
Focus Control		Manual
Mount		C-Mount
Flange Back Length		17.526 mm
Dimension		Φ48 × 71.32 mm
Weight		245 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" (14.14mm×10.35mm)		1" (12.45mm×9.83mm)		2/3" (8.45mm×7.07mm)	
				H	V	H	V	H	V
5	near	6.42	-0.523	27.00	19.70	25.00	19.00	17.00	12.75
	far	8.12	-0.487	29.00	21.20	26.00	19.90	18.00	13.50
2	near	27.65	-0.272	52.00	38.10	47.00	35.98	33.00	24.75
	far	34.45	-0.236	60.00	43.94	55.00	42.10	37.00	27.75
1	near	47.19	-0.188	75.00	54.93	68.00	52.00	47.00	35.25
	far	63.34	-0.150	94.00	68.84	85.00	65.00	59.00	44.25
0	100		-0.100	144.95	106.1	127.63	100.77	86.62	72.48
	150		-0.071	198.44	145.25	174.37	137.68	118.35	99.02
	200		-0.057	250.77	183.55	220.35	173.98	149.56	125.13
	250		-0.045	312.08	228.43	274.23	216.52	186.12	155.73
	300		-0.039	364.22	266.60	320.05	252.70	217.22	181.75
	350		-0.033	425.47	311.43	373.87	295.20	253.75	212.31
	400		-0.029	481.91	352.74	423.47	334.35	287.41	240.48
	450		-0.026	538.72	394.32	473.38	373.76	321.29	268.82
	500		-0.024	595.31	435.74	523.11	413.03	355.04	297.06
	550		-0.021	652.92	477.91	573.73	453.00	389.40	325.81
	600		-0.020	711.97	521.14	625.63	493.97	424.62	355.28
	650		-0.019	765.85	560.58	672.97	531.35	456.76	382.16
	700		-0.017	823.74	602.95	723.84	571.51	491.28	411.05
	800		-0.015	938.30	686.80	824.50	650.99	559.60	468.21
900		-0.014	1049.50	768.20	922.22	728.15	625.93	523.70	
1000		-0.012	1151.89	843.15	1012.20	799.19	686.99	574.80	

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