

MVL-KF1628M-12MPE

1.1" 16mm 12MP FA LENS

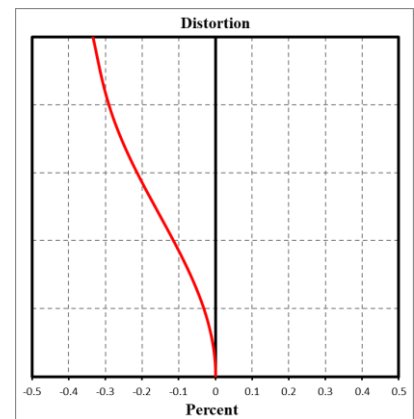
KF-E series FA Lens are optimized for machine vision light sources and sensor, with high resolution, excellent image quality, high transmittance and good stability. Featured with fixed focal length, manual aperture and compact size, it is suitable for machine vision industry applications and ideal for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



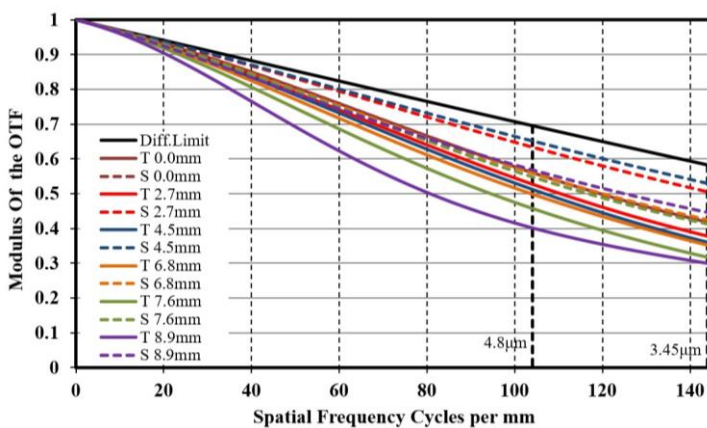
Key Features

- 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

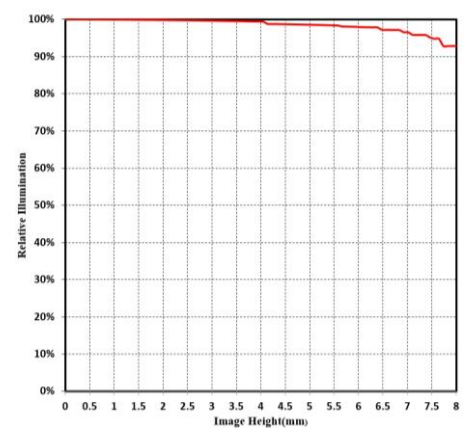
Distortion



MTF



Relative Illumination

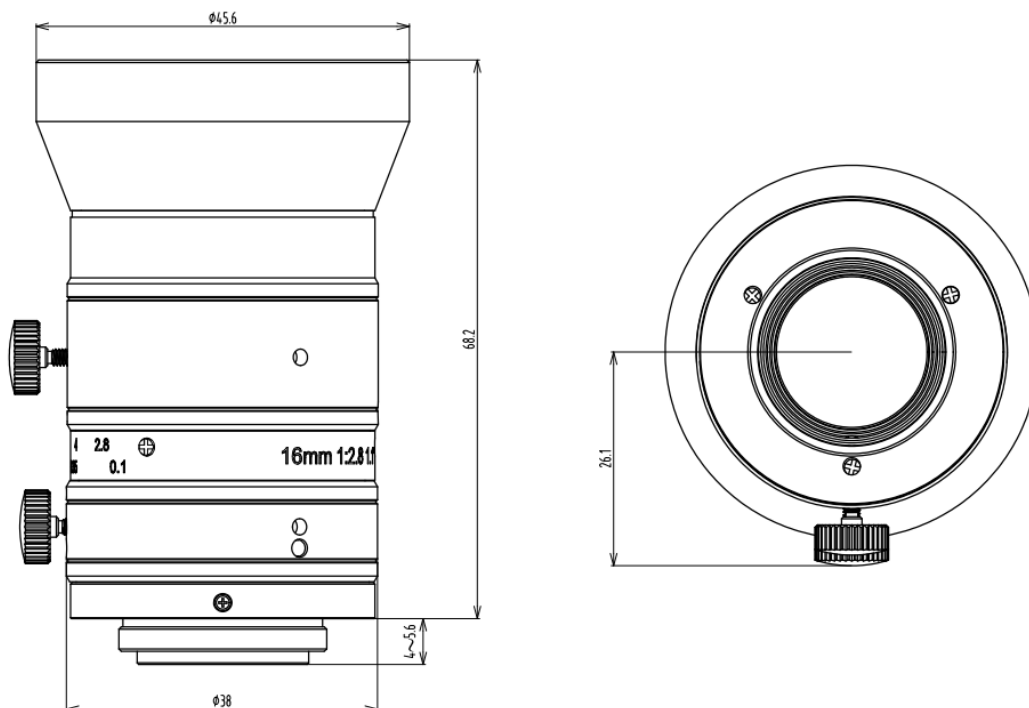


Note: The above curves are the simulate results based on F2.8, $\beta = -0.031$, $WD = 500$ mm.

Specification

Parameter	Model	MVL-KF1628M-12MPE
		Fixed focal length, Manual iris, 12MP, FA lens
Performance		
Focal length		16 mm
F-number		F2.8 to F16
Image size		Ø17.6 mm (1.1")
Distortion		0.15%
Minimum object distance		0.1 m
Field of view		D (17.52 mm): 55.6° H (14.14 mm): 45.8° V (10.35 mm): 35.3°
Mechanical		
Iris control		Manual
Focus control		Manual
Filter thread		M43 × 0.75
Mount		C-mount
Flange back length		17.526 mm
Dimension		Ø45.6 mm × 68.2 mm (Ø1.8" x 2.7")
Weight		189 g (0.4 lb.)
Temperature		-10°C to 50°C (14 °F to 122 °F)
General		
Certification		RoHS 2.0

Dimension



Unit: mm

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	15.02	-0.441	32.00	23.43	29.00	22.20	20.00	15.00
	far	16.15	-0.428	33.00	24.17	30.00	22.96	21.00	15.75
2	near	41.07	-0.257	55.00	40.28	50.00	38.28	34.00	25.50
	far	47.84	-0.231	61.00	44.68	55.00	42.10	38.00	28.50
1	near	60.30	-0.196	72.00	52.73	65.00	49.76	45.00	33.75
	far	73.91	-0.168	84.00	61.52	76.00	58.19	52.00	39.00
0		100	-0.134	105.52	77.24	92.91	73.36	63.06	52.76
		150	-0.095	149.63	109.52	131.75	104.02	89.42	74.81
		200	-0.073	193.96	141.98	170.78	134.84	115.91	96.98
		250	-0.059	239.66	175.42	211.02	166.61	143.22	119.83
		300	-0.050	282.80	207.00	249.00	196.60	169.00	141.40
		350	-0.044	321.36	235.23	282.95	223.41	192.05	160.68
		400	-0.039	361.64	264.71	318.41	251.41	216.11	180.82
		450	-0.035	405.16	296.56	356.73	281.66	242.12	202.58
		500	-0.031	456.13	333.87	401.61	317.10	272.58	228.06
		550	-0.029	490.97	359.38	432.29	341.32	293.40	245.49
		600	-0.026	535.61	392.05	471.59	372.35	320.08	267.80
		650	-0.024	579.51	424.18	510.25	402.87	346.31	289.75
		700	-0.023	622.91	455.95	548.46	433.04	372.25	311.45
		800	-0.020	707.00	517.50	622.50	491.50	422.50	353.50
		900	-0.018	794.38	581.46	699.44	552.25	474.72	397.19
	1000	-0.016	883.75	646.88	778.13	614.38	528.13	441.88	