

MVL-HF1628M-6MPE

1/1.8" 6mm 6MP FA LENS

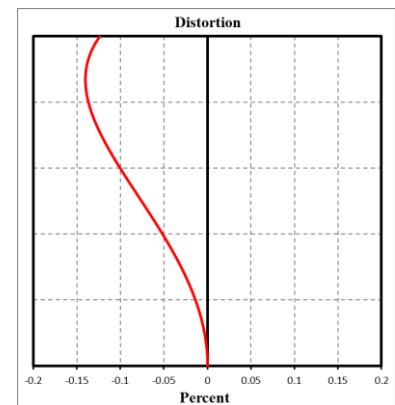
HF-E series FA Lens are optimized for machine vision light sources and sensors, with high resolution, excellent image uniformity, and good stability. Featured with fixed focal length, fixed iris and compact size, it is suitable for machine vision industry applications.



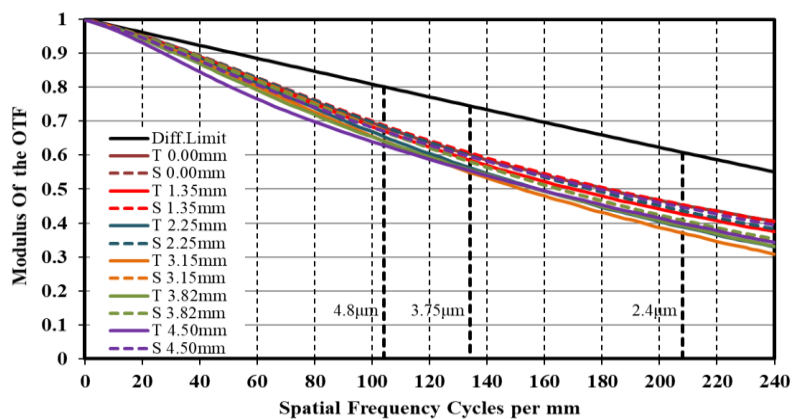
Key Features

- Higher image clarity and contrast ratio
- Ultra-low distortion and higher relative illumination rate
- Good optical performance at ultra-short working distance
- Compact design, convenient for device integration

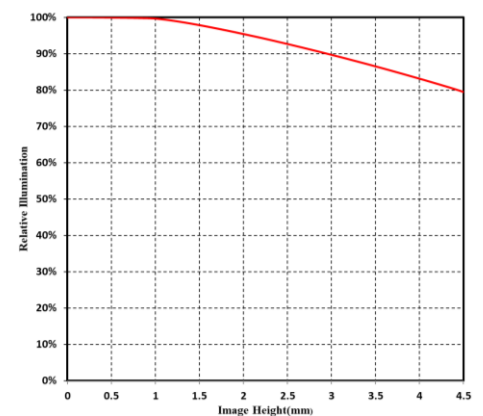
Distortion



MTF



Relative Illumination

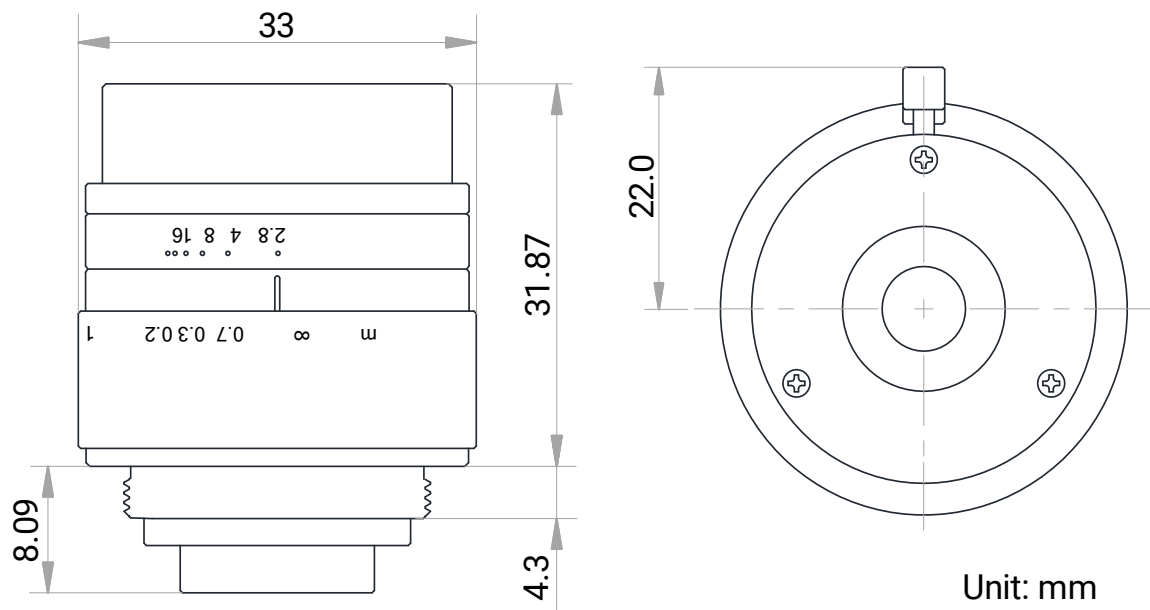


Note: The above curves are the simulated results based on F2.8, $\beta=-0.0515$, WD=300 mm.

Specification

Model		MVL-HF1628M-6MPE
Parameter		Fixed focal length, Manual iris, 6MP, FA Lens
Performance		
Focal length	16 mm	
F-number	F2.8 to F16	
Image size	Ø9 mm (1/1.8")	
Distortion	−0.018%	
Minimum object distance	0.1 m	
Field of view	D (8.96 mm): 31.28° H (7.38 mm): 25.94° V (4.92 mm): 17.48°	
Mechanical		
Iris control	Manual	
Focus control	Manual	
Filter thread	M27 × P0.5	
Mount	C-mount	
Flange back length	17.526 mm	
Dimension	Ø33 mm × 31.9 mm (Ø1.3" × 1.3")	
Weight	56.1 g (0.1 lb.)	
Temperature	−10 °C to 50 °C (14 °F to 122 °F)	
General		
Certification	RoHS 2.0	

Dimension



Field of View

Extension (mm)	Working Distance (mm)		Magnification	Field of View (mm)			
				1/1.8"		1/2"	
				H(7.38mm)	V(4.92mm)	H(6.22mm)	V(4.67mm)
5	near	27	-0.476	15.67	10.40	13.17	9.87
	far	44	-0.310	24.02	15.94	20.20	15.13
2	near	50	-0.277	26.84	17.83	22.58	16.92
	far	122	-0.124	59.56	39.64	50.16	37.62
1	near	67	-0.211	35.26	23.43	29.67	22.23
	far	252	-0.062	118.60	79.04	99.95	75.02
0	100		-0.144	51.38	34.17	43.25	32.43
	150		-0.099	74.67	49.69	62.88	47.16
	200		-0.076	97.70	65.06	82.30	61.75
	250		-0.061	120.63	80.35	101.63	76.26
	300		-0.052	143.49	95.61	120.92	90.75
	350		-0.044	166.32	110.85	140.17	105.20
	400		-0.039	189.12	126.07	159.40	119.65
	450		-0.035	211.91	141.27	178.62	134.09
	500		-0.032	234.69	156.48	197.83	148.52
	550		-0.029	257.46	171.67	217.04	162.95
	600		-0.026	280.22	186.87	236.23	177.37
	650		-0.024	302.98	202.05	255.43	191.79
	700		-0.023	325.73	217.24	274.62	206.20
	800		-0.020	371.23	247.61	312.99	235.03
	900		-0.018	416.72	277.97	351.36	263.85
	1000		-0.016	462.20	308.33	389.72	292.66

