

# MVL-HF1628M-6MPE

## 1/1.8" 16mm 6MP FA LENS

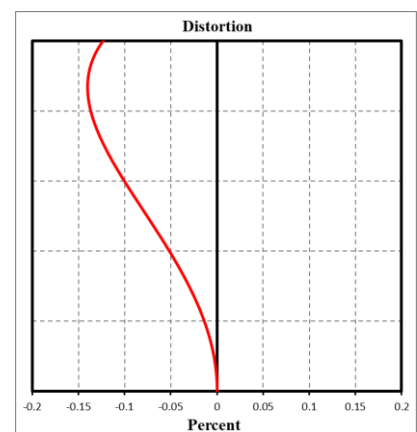
HF-E series FA Lens are optimized for machine vision light sources and sensor, with high resolution, excellent image quality, high transmittance and good stability. Featured with fixed focal length, manual aperture and compact size, it is suitable for machine vision industry applications and ideal for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



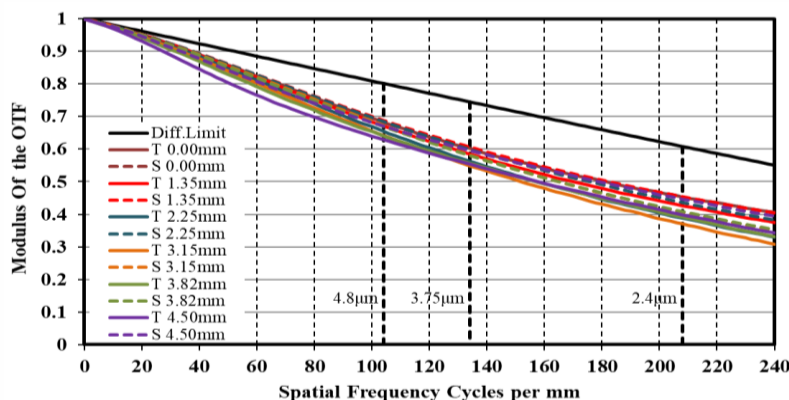
### Key Features

- 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

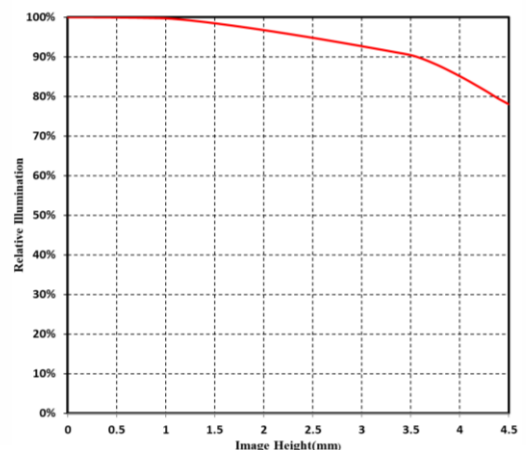
### Distortion



### MTF



### Relative Illumination



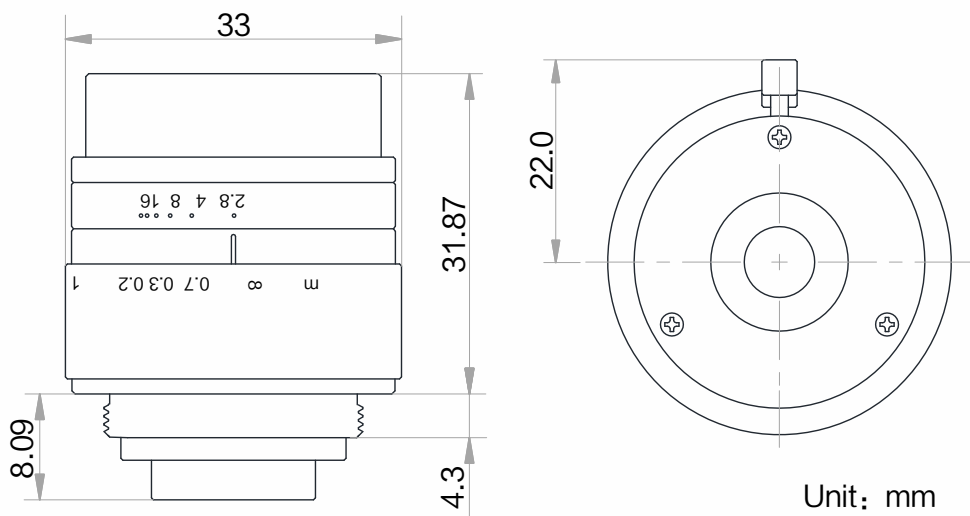
Note: The above curves are the simulate results based on F2.8,  $\beta=-0.0515$ , WD=300 mm.



## Specification

Parameter	Model	MVL-HF1628M-6MPE
		Fixed focal length, Manual iris, 6MP, FA Lens
<b>Performance</b>		
Focal Length		16 mm
F-Number		F2.8 ~ F16
Image Size		Φ9 mm(1/1.8")
Distortion		-0.018%
Minimum Operation Distance		0.1 m
Field of View		D (8.96mm): 31.28° H (7.38mm): 25.94° V (4.92mm): 17.48°
<b>Mechanical</b>		
Iris Control		Manual
Focus Control		Manual
Filter Thread		M27 × P0.5
Mount		C-Mount
Flange Back Length		17.526 mm
Dimension		Φ33 × 31.9 mm
Weight		56.1 g
Temperature		-10 ~ 50℃
<b>General</b>		
Certification		RoHS2.0

## 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	

**HIKROBOT**

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