

**MVL-HF4028M-6MPE**  
**1/1.8" 40mm 6MP FA LENS**

FA series 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

**Order Model**

MVL-HF4028M-6MPE

**Specification**

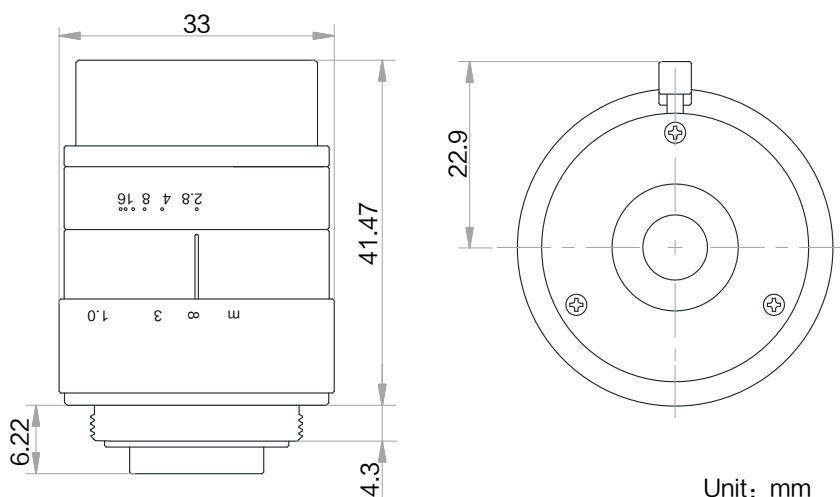
Model		MVL-HF4028M-6MPE	
Parameter		Fixed focal length, Manual iris, 6MP, FA Lens	
Focal Length		40mm	C-Mount
F-Number		F2.8~F16	Flange Back Length 17.526mm
Image Size		Φ9mm(1/1.8")	Filter Thread M27×P0.5
Distortion		-0.024%	Minimum Operation Distance 0.25m
Control	Iris	Manual	Dimension Φ33×41.5mm
	Focus	Manual	
Operating Temperature		-10~50°C	Weight 67.1g
Angle of View		1/1.8"	D (8.96mm) 10.6°
			H (7.37mm) 8.7°
			V (4.92mm) 5.8°



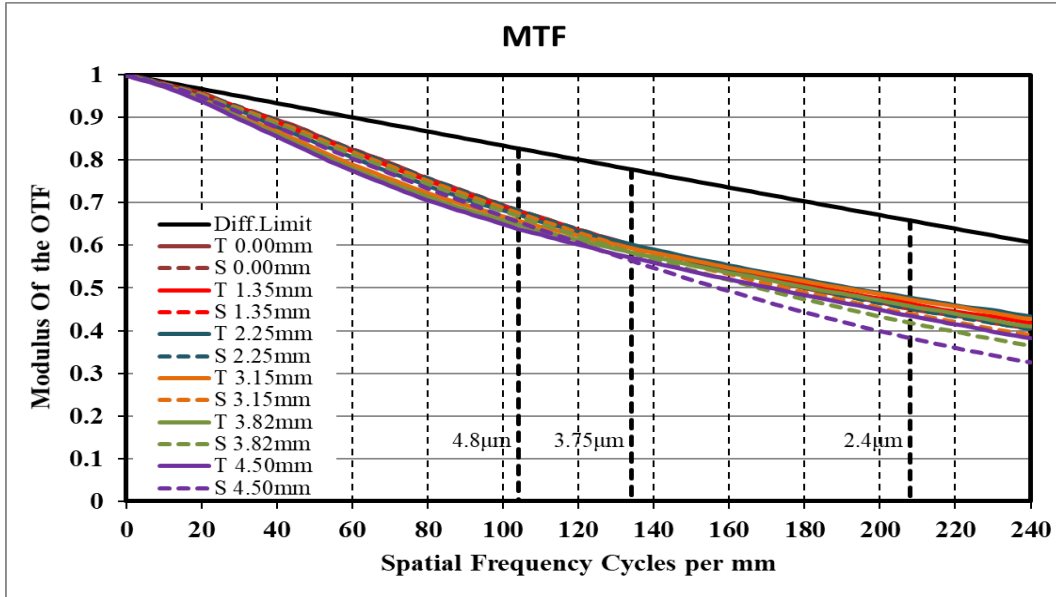
## Field of View

Extension (mm)	Working Distance (mm)		Magnification	Field of View (mm)			
				1/1.8'' (7.38mm×4.92mm)		1/2'' (6.22mm×4.67mm)	
				H	V	H	V
20	near	78	-0.569	13.00	8.66	10.95	8.22
	far	148	-0.310	23.90	15.90	20.12	15.09
10	near	98	-0.431	17.17	11.43	14.46	10.85
	far	226	-0.207	35.73	23.79	30.09	22.58
5	near	138	-0.293	25.28	16.84	21.30	15.98
	far	460	-0.104	71.21	47.48	60.02	45.07
2	near	187	-0.209	35.34	23.54	29.77	22.35
	far	1162	-0.041	177.84	118.68	149.97	112.66
1	near	214	-0.181	40.76	27.16	34.35	25.78
	far	2337	-0.021	356.09	237.72	300.34	225.67
0		250	-0.153	48.15	32.08	40.57	30.45
		300	-0.129	57.16	38.09	48.16	36.15
		350	-0.112	65.97	43.96	55.59	41.73
		400	-0.099	74.63	49.74	62.89	47.21
		450	-0.089	83.18	55.43	70.09	52.62
		500	-0.081	91.63	61.07	77.22	57.97
		550	-0.074	100.00	66.66	84.28	63.27
		600	-0.068	108.31	72.20	91.28	68.53
		650	-0.063	116.56	77.71	98.24	73.76
		700	-0.059	124.77	83.18	105.16	78.96
		800	-0.052	141.06	94.05	118.90	89.27
		900	-0.047	157.22	104.84	132.52	99.51
		1000	-0.043	173.27	115.55	146.06	109.69

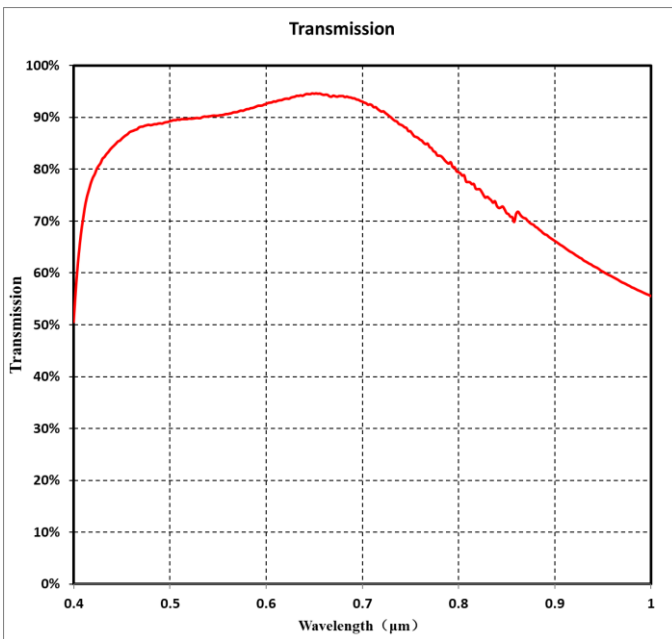
## Dimension



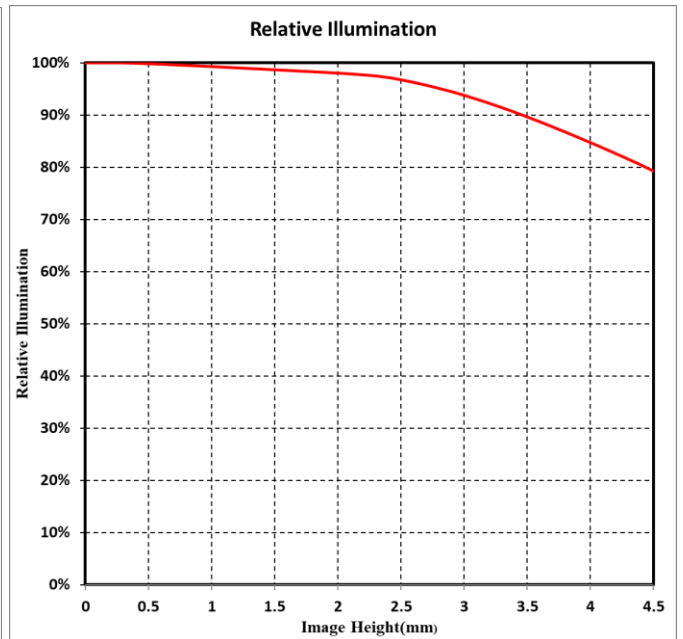
# MTF



## Transmission



## Relative Illumination



Note: The above curves are the simulate results based on F2.8,  $\beta=-0.0806$ , WD=500 mm.

**HIKROBOT**

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