

SA5020M-10MP

4/3 50 mm 10 MP FA Lens

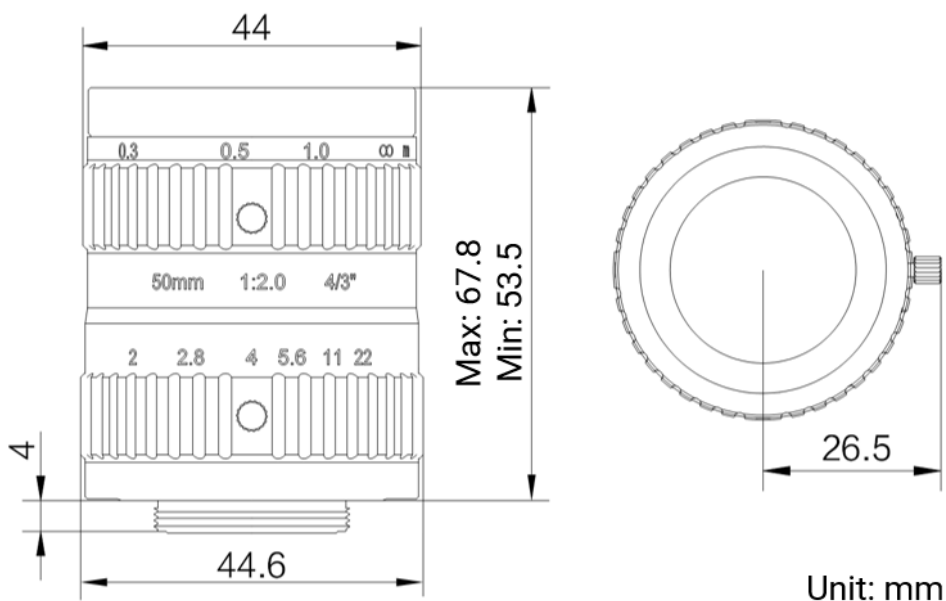
SA series FA Lens are optimized for machine vision light sources and sensors, with high resolution, excellent image uniformity, high transmittance and good stability. Featured with fixed focal length, manual aperture and compact size, it is suitable for machine vision industry application.



Key Features

- High resolution and excellent image uniformity
- F2.0, maximum image circle of 4/3"
- Low distortion to improve measurement accuracy
- High peripheral brightness ratio to ensure image brightness consistency

Dimension



Specification

Model	SA5020M-10MP
Performance	
Focal length	50 mm
F-number	F2.0 to F22
Image size	Ø23 mm (4/3")
Optical distortion	-0.14%
Minimum object distance	0.3 m
Field of view	D (22.6 mm): 25.9° H (18.13 mm): 20.9° V (13.6 mm): 15.7°
Mechanical	
Iris control	Manual
Focus control	Manual
Filter thread	M40.5 × 0.5
Mount	C-mount
Flange back length	17.526 mm
Dimension	Ø44.6 mm × 67.8 mm (Ø1.8" × 2.7")
Weight	165 g (0.4 lb.)
Temperature	-10 °C to 50 °C (14 °F to 122 °F)
General	
Certification	RoHS 2.0

Field of View

Extension (mm)	Working distance (mm)		Magnification	Field of view (mm)					
				4/3"		1.1"		2/3"	
				H (18.13)	V (13.6)	H (14.14)	V (10.35)	H (8.45)	V (7.07)
20	near	102.60	-0.594	30.52	22.90	23.80	17.42	14.23	11.90
	far	147.16	-0.401	45.27	33.96	35.31	25.84	21.10	17.65
10	near	145.32	-0.394	46.02	34.52	35.89	26.27	21.45	17.94
	far	271.70	-0.201	90.42	67.83	70.52	51.62	42.14	35.26
5	near	188.49	-0.294	61.67	46.26	48.10	35.20	28.74	24.05
	far	519.83	-0.101	180.40	135.32	140.70	102.99	84.08	70.35
2	near	232.10	-0.234	77.48	58.12	60.43	44.23	36.11	30.21
	far	1256.89	-0.041	447.65	335.80	349.14	255.56	208.64	174.57
1	near	252.06	-0.214	84.72	63.55	66.07	48.36	39.49	33.04
	far	2461.34	-0.021	884.39	663.41	689.76	504.88	412.20	344.88
0		300	-0.190	95.63	71.69	74.54	54.54	44.52	37.24
		350	-0.160	113.79	85.30	88.69	64.89	52.97	44.31
		400	-0.138	131.95	98.95	103.05	75.25	61.42	51.38
		450	-0.121	150.12	112.53	117.01	85.61	69.88	58.46
		500	-0.108	168.29	126.15	131.17	95.96	78.33	65.53
		550	-0.097	186.45	139.76	145.33	106.32	86.79	72.60
		600	-0.089	204.59	153.36	159.46	116.67	95.23	79.67
		650	-0.082	222.74	166.97	173.61	127.02	103.68	86.74
		700	-0.075	240.90	180.58	187.76	137.37	112.13	93.81
		750	-0.070	259.04	194.18	201.91	147.72	120.58	100.88
		800	-0.066	277.22	207.81	216.08	158.09	129.05	107.96
		850	-0.061	295.38	221.43	230.24	168.45	137.50	115.04
		900	-0.058	313.56	235.05	244.40	178.82	145.96	122.11
	950	-0.055	331.70	248.66	258.55	189.17	154.42	129.18	
	1000	-0.052	349.86	262.27	272.70	199.53	162.87	136.26	