

SA1220M-10MP

4/3" 12 mm 10 MP FA Lens

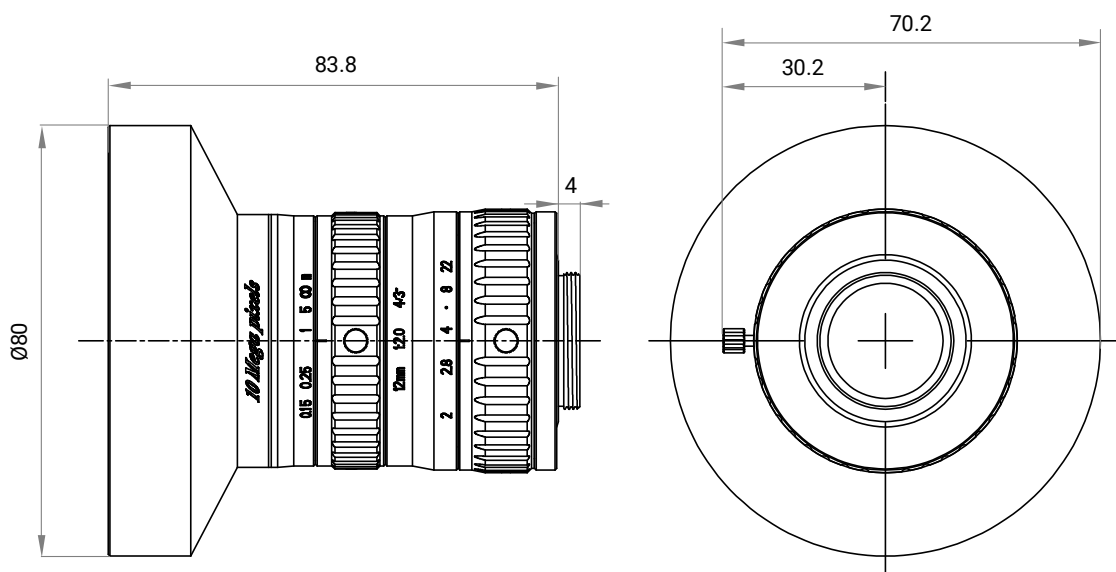
SA series FA Lens are optimized for machine vision light sources and sensors, with high resolution, excellent image uniformity, high transmittance and good stability. Featured with fixed focal length, manual aperture and compact size, it is suitable for machine vision industry application.



Key Features

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

Dimension



Unit: mm

Specification

Model	SA1220M-10MP
Performance	
Focal length	12 mm
F-number	F2.0 to F22
Image size	Ø23 mm (4/3")
Optical distortion	-2.40%
Minimum object distance	0.15 m
Field of view	D (22.6 mm): 89.0° H (18.13 mm): 75.5° V (13.6 mm): 61.1°
Mechanical	
Iris control	Manual
Focus control	Manual
Filter thread	M77 × 0.75
Mount	C-mount
Flange back length	17.526 mm
Dimension	Ø80 mm × 83.8 mm (Ø3.1" × 3.3")
Weight	445 g (1.0 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)
2	near	24.95	-0.236	76.93	57.71	60.00	43.92	35.86	30.00
	far	45.70	-0.167	108.70	81.54	84.78	62.06	50.66	42.39
1	near	52.80	-0.152	119.02	89.28	92.82	67.94	55.47	46.41
	far	117.54	-0.083	217.25	162.97	169.44	124.02	101.25	84.72
0	150		-0.067	283.19	209.06	217.80	157.18	127.50	106.24
	200		-0.053	361.19	267.20	278.32	201.09	163.18	136.00
	250		-0.043	439.16	325.33	338.83	244.98	198.85	165.75
	300		-0.037	517.09	383.43	399.30	288.86	234.50	195.48
	350		-0.032	595.02	441.53	459.78	332.73	270.16	225.22
	400		-0.028	672.95	499.65	520.27	376.62	305.82	254.97
	450		-0.025	750.84	557.72	580.71	420.47	341.46	284.69
	500		-0.023	828.76	615.82	641.18	464.35	377.11	314.42
	550		-0.021	906.67	673.91	701.65	508.22	412.76	344.16
	600		-0.019	984.58	732.01	762.12	552.10	448.42	373.90
	650		-0.018	1062.48	790.10	822.58	595.97	484.07	403.63
	700		-0.017	1140.39	848.19	883.05	639.84	519.72	433.37
	750		-0.015	1218.29	906.28	943.51	683.71	555.37	463.10
	800		-0.015	1296.19	964.37	1003.98	727.58	591.02	492.84
	850		-0.014	1374.09	1022.46	1064.44	771.45	626.67	522.57
	900		-0.013	1451.99	1080.55	1124.90	815.32	662.32	552.31
	950		-0.012	1529.89	1138.64	1185.36	859.19	697.97	582.04
1000		-0.012	1607.79	1196.73	1245.83	903.06	733.62	611.78	