

1" 2 MEGA PIXEL LENS

MACHINE VISION LENS

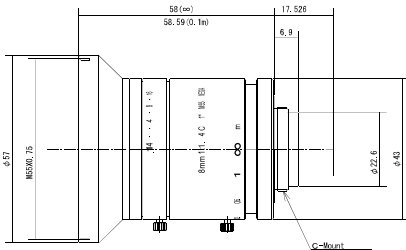
C-MOUNT
1" 2MP

• 8, 12, 16, 25, 50mm. 5 Lens Series • Compatible with 1" (φ 16mm) Large Format Sensor • High Resolution 2 Megapixel

NEW

V0814-MP

1"
2MP
FIX
MANUAL



Focal Length	8mm			
Max. Aperture Ratio	1:1.4			
Max. Image Format	12.8mm x 9.6mm (φ 16mm)			
Operation Range	Iris F1.4 - F16.0			
	Focus 0.1m - Inf.			
Control	Iris Manual			
	Focus Manual			
Object Dimension at M.O.D.	19.5cm x 14.2cm 1"			
Angle of View	D	92.4°	82.4°	70.7°
	H	79.7°	1/1.2" 43.9°	2/3" 58.3°
	V	63.0°	47.9°	44.7°
Operating Temperature	-10°C ~ +50°C			

Distortion	1"	-7.07%(y)=8.0)	1/1.2"	-7.30%(y)=6.7)	2/3"	-6.03%(y)=5.5)
Back Focal Length	11.65mm					
Flange Back Length	17.526mm					
Mount	C-Mount					
Filter Size	M55.0 P=0.75mm					
Dimensions	φ 57mm x 58mm					
Weight	250g					

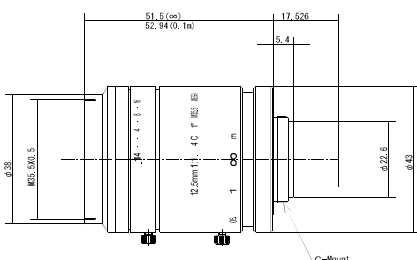
Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)					
			1"		1/1.2"		2/3"	
			H	V	H	V	H	V
1000	0.007	-	1,947.9	1,423.4	1,712.1	1,075.8	1,333.3	1,000.0
950	0.007	-	1,850.5	1,352.2	1,637.7	1,029.0	1,275.4	956.5
900	0.007	-	1,753.1	1,281.1	1,548.0	972.6	1,205.5	904.1
850	0.008	-	1,655.7	1,209.9	1,467.5	922.1	1,142.9	857.1
800	0.008	-	1,558.3	1,138.7	1,378.1	865.9	1,073.2	804.9
750	0.009	-	1,460.9	1,067.6	1,284.1	806.8	1,000.0	750.0
700	0.009	-	1,363.5	996.4	1,202.1	755.3	936.2	702.1
650	0.010	-	1,266.1	925.2	1,118.8	703.0	871.3	653.5
600	0.011	-	1,168.7	854.0	1,027.3	645.5	800.0	600.0
550	0.012	-	1,071.4	782.9	949.6	596.6	739.5	554.6
500	0.013	-	974.0	711.7	862.6	542.0	671.8	503.8
450	0.015	-	876.6	640.5	774.0	486.3	602.7	452.1
400	0.016	-	779.2	569.4	689.0	432.9	536.6	402.4
350	0.019	-	681.8	498.2	601.1	377.7	468.1	351.1
300	0.022	-	584.4	427.0	516.0	324.2	401.8	301.4
250	0.026	-	487.0	355.9	429.7	270.0	334.6	251.0
200	0.033	-	389.6	284.7	343.5	215.8	267.5	200.6
150	0.044	-	292.2	213.5	258.0	162.1	200.9	150.7
100	0.066	-	194.8	142.3	170.0	103.0	129.6	95.4

Field of View = CCD Size / Optical Magnification

NEW

V1214-MP

1"
2MP
FIX
MANUAL



Focal Length	12.5mm			
Max. Aperture Ratio	1:1.4			
Max. Image Format	12.8mm x 9.6mm (φ 16mm)			
Operation Range	Iris F1.4 - F16.0			
	Focus 0.1m - Inf.			
Control	Iris Manual			
	Focus Manual			
Object Dimension at M.O.D.	11.9cm x 8.8cm 1"			
Angle of View	D	67.6°	58.0°	48.4°
	H	56.5°	1/1.2" 49.6°	2/3" 39.1°
	V	42.5°	31.7°	29.5°
Operating Temperature	-10°C ~ +50°C			

Distortion	1"	-5.93%(y)=8.0)	1/1.2"	-4.9%(y)=6.7)	2/3"	-3.63%(y)=5.5)
Back Focal Length	12.55mm					
Flange Back Length	17.526mm					
Mount	C-Mount					
Filter Size	M35.5 P=0.5mm					
Dimensions	φ 38mm x 51.5mm					
Weight	175g					

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)					
			1"		1/1.2"		2/3"	
			H	V	H	V	H	V
1000	0.011	-	1,192.7	877.6	1,056.1	663.6	822.4	616.8
950	0.011	-	1,133.1	833.7	1,000.0	628.3	778.8	584.1
900	0.012	-	1,073.4	789.8	949.6	596.6	739.5	554.6
850	0.013	-	1,013.8	746.0	896.8	563.5	698.4	523.8
800	0.013	-	954.2	702.1	843.3	529.9	656.7	492.5
750	0.014	-	894.5	658.2	790.2	496.5	615.4	461.5
700	0.015	-	834.9	614.3	738.6	464.1	575.2	431.4
650	0.017	-	775.3	570.4	684.9	430.3	533.3	400.0
600	0.018	-	715.6	526.6	631.3	396.7	491.6	368.7
550	0.020	-	656.0	482.7	579.5	364.1	451.3	338.5
500	0.022	-	596.4	438.8	525.6	330.2	409.3	307.0
450	0.024	-	536.7	394.9	474.8	298.3	369.8	277.3
400	0.027	-	477.1	351.0	421.6	264.9	328.4	246.3
350	0.031	-	417.5	307.2	368.1	231.3	286.6	215.0
300	0.036	-	357.0	262.7	314.8	197.8	245.1	183.8
250	0.043	-	298.2	219.4	263.4	165.5	205.1	153.9
200	0.054	-	238.5	175.5	210.4	132.2	163.9	122.9
150	0.072	-	178.9	131.6	158.0	99.3	123.1	92.3
100	0.107	-	119.3	87.8	104.3	64.1	80.1	59.5

Field of View = CCD Size / Optical Magnification



1" 12 MEGA PIXEL LENS

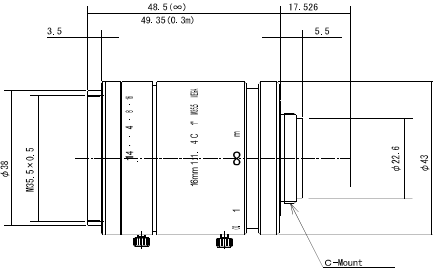
MACHINE VISION LENS

- 8, 12, 16, 25, 50mm. 5 Lens Series
- Compatible with 1" (φ 16mm) Large Format Sensor
- High Resolution 2 Megapixel

NEW

V1614-MP

- 1"
- 2MP
- FIX
- MANUAL



Focal Length	16mm						
Max. Aperture Ratio	1:1.4						
Max. Image Format	12.8mm x 9.6mm (φ 16mm)						
Operation Range	Iris	F1.4 - F16.0					
	Focus	0.3m - Inf.					
Control	Iris	Manual					
	Focus	Manual					
Object Dimension at M.O.D.	25.2cm x 18.7cm 1"						
Angle of View	D		54.4°		46.2°		38.3°
	H	1"	44.3°	1/1.2"	39.3°	2/3"	30.3°
	V		33.6°		24.9°		23.2°
Operating Temperature	-10°C ~ +50°C						

Distortion	1"	-3.84%(y=8.0)	1/1.2"	-3.0%(y=6.7)	2/3"	-2.24%(y=5.5)
Back Focal Length	12.14mm					
Flange Back Length	17.526mm					
Mount	C-Mount					
Filter Size	M 35.5 P=0.5mm					
Dimensions	φ 38mm x 48.5mm					
Weight	170g					

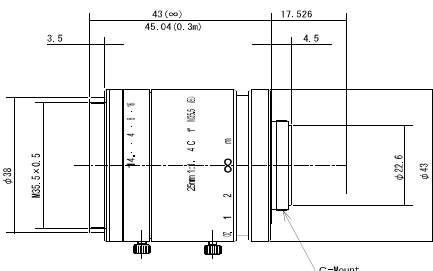
Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)					
			1"		1/1.2"		2/3"	
			H	V	H	V	H	V
1000	0.015	-	840.4	622.5	743.4	467.1	579.0	434.2
950	0.016	-	798.4	591.3	706.3	443.8	550.0	412.5
900	0.017	-	756.4	560.2	668.6	420.1	520.7	390.5
850	0.018	-	714.3	529.1	631.3	396.7	491.6	368.7
800	0.019	-	672.3	498.0	594.7	373.7	463.2	347.4
750	0.020	-	630.3	466.9	556.7	349.8	433.5	325.1
700	0.022	-	588.3	435.7	518.4	325.7	403.7	302.8
650	0.023	-	546.3	404.6	482.9	303.4	376.1	282.1
600	0.025	-	504.2	373.5	444.9	279.5	346.5	259.8
550	0.028	-	462.2	342.4	407.9	256.3	317.7	238.3
500	0.031	-	420.2	311.2	370.5	232.8	288.5	216.4
450	0.034	-	378.2	280.1	334.3	210.1	260.4	195.3
400	0.038	-	336.2	249.3	296.6	186.4	231.0	173.2
350	0.044	-	294.1	217.9	259.8	163.2	202.3	151.7
300	0.051	-	252.1	186.7	221.2	137.0	170.7	127.2
250	0.070	1.0	182.4	136.8	161.0	101.1	125.4	94.0
200	0.090	1.5	142.9	107.3	126.3	79.3	98.3	73.7
150	0.124	2.0	103.4	77.6	91.4	57.4	71.1	53.4
100	0.200	3.0	63.9	48.0	56.4	35.5	44.0	33.0

Field of View = CCD Size / Optical Magnification

NEW

V2514-MP

- 1"
- 2MP
- FIX
- MANUAL



Focal Length	25mm						
Max. Aperture Ratio	1:1.4						
Max. Image Format	12.8mm x 9.6mm (φ 16mm)						
Operation Range	Iris	F1.4 - F16.0					
	Focus	0.3m - Inf.					
Control	Iris	Manual					
	Focus	Manual					
Object Dimension at M.O.D.	16.1cm x 11.9cm 1"						
Angle of View	D		36.6°		30.7°		25.2°
	H	1"	29.3°	1/1.2"	25.9°	2/3"	20.2°
	V		22.0°		16.3°		15.1°
Operating Temperature	-10°C ~ +50°C						

Distortion	1"	-3.14%(y=8.0)	1/1.2"	-2.2%(y=6.7)	2/3"	-1.48%(y=5.5)
Back Focal Length	15.71mm					
Flange Back Length	17.526mm					
Mount	C-Mount					
Filter Size	M35.5 P=0.5mm					
Dimensions	φ 38mm x 43mm					
Weight	150g					

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)					
			1"		1/1.2"		2/3"	
			H	V	H	V	H	V
1000	0.024	-	536.3	401.7	472.8	297.1	368.2	276.2
950	0.025	-	509.5	382.5	450.2	282.9	350.6	263.0
900	0.027	-	482.6	362.3	426.4	267.9	332.1	249.1
850	0.028	-	455.8	341.6	402.1	252.7	313.2	234.9
800	0.030	-	429.0	322.2	379.2	238.3	295.3	221.5
750	0.032	-	402.2	301.9	355.4	223.3	276.7	207.6
700	0.034	-	375.4	281.5	331.4	208.2	258.1	193.6
650	0.037	-	348.6	261.6	307.9	193.5	239.8	179.8
600	0.040	-	321.8	241.2	283.9	178.4	221.1	165.8
550	0.043	-	295.0	221.2	260.4	163.6	202.8	152.1
500	0.048	-	268.1	201.3	236.9	148.9	184.5	138.4
450	0.053	-	241.3	181.1	213.2	134.0	166.0	124.5
400	0.060	-	214.5	160.8	189.3	118.9	147.4	110.6
350	0.068	-	187.7	140.8	165.7	104.1	129.0	96.8
300	0.080	-	160.9	119.2	141.2	87.6	109.1	81.3
250	0.106	2.5	120.7	90.6	106.6	67.0	83.0	62.3
200	0.135	3.5	95.1	71.3	84.0	52.8	65.4	49.0
150	0.184	4.5	69.5	52.2	61.4	38.6	47.8	35.9
100	0.291	7.5	43.9	32.9	38.8	24.4	30.2	22.7

Field of View = CCD Size / Optical Magnification

1" 2 MEGAPIXEL LENS

MACHINE VISION LENS

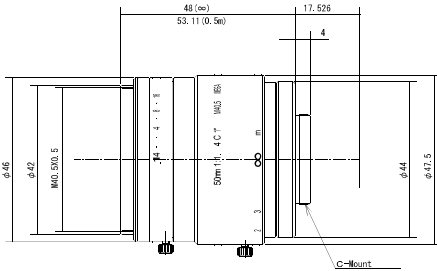


- 8, 12, 16, 25, 50mm. 5 Lens Series
- Compatible with 1" (φ 16mm) Large Format Sensor
- High Resolution 2 Megapixel

NEW

V5014-MP

- 1"
- 2MP
- FIX
- MANUAL



Focal Length	50mm	
Max. Aperture Ratio	1:1.4	
Max. Image Format	12.8mm x 9.6mm (φ 16mm)	
Operation Range	Iris	F1.4 - F16.0
	Focus	0.5m - Inf.
Control	Iris	Manual
	Focus	Manual
Object Dimension at M.O.D.	12.6cm x 9.4cm 1"	
Angle of View	D	18.0° 15.1° 9.1°
	H	14.5° 1/1.2" 12.8° 2/3" 7.3°
	V	10.9° 8.1° 5.5°
Operating Temperature	-10°C ~ +50°C	

Distortion	1"	0.82%(y=8.0)	1/1.2"	0.7%(y=6.7)	2/3"	0.51%(y=5.5)
Back Focal Length	14.55mm					
Flange Back Length	17.526mm					
Mount	C-Mount					
Filter Size	M40.5 P=0.5mm					
Dimensions	φ 46mm x 48mm					
Weight	200g					

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)					
			1"		1/1.2"		2/3"	
			H	V	H	V	H	V
1000	0.051	-	251.5	188.2	222.1	139.5	172.9	129.7
950	0.054	-	239.0	178.8	211.0	132.6	164.3	123.2
900	0.057	-	226.4	169.4	199.9	125.6	155.6	116.7
850	0.060	-	213.8	160.0	188.8	118.6	147.0	110.2
800	0.064	-	201.2	150.6	177.7	111.6	138.4	103.8
750	0.068	-	188.7	141.2	166.6	104.7	129.7	97.3
700	0.073	-	176.1	131.8	155.5	97.7	121.1	90.8
650	0.078	-	163.5	122.3	144.3	90.7	112.4	84.3
600	0.085	-	150.9	112.9	133.2	83.7	103.8	77.8
550	0.093	-	138.3	103.5	122.1	76.7	95.1	71.3
500	0.102	-	125.8	94.1	110.9	69.5	86.2	64.2
450	0.113	5.5	113.0	84.7	99.7	62.7	77.7	58.3
400	0.128	6.5	100.2	75.1	88.4	55.6	68.9	51.6
350	0.147	7.5	87.4	65.5	77.1	48.5	60.1	45.1
300	0.172	8.5	74.6	55.9	65.8	41.4	51.3	38.4
250	0.207	10.5	61.8	46.3	54.5	34.3	42.5	31.9
200	0.261	13.0	49.0	36.7	43.2	27.2	33.7	25.3
150	0.354	17.5	36.2	27.1	31.9	20.1	24.9	18.7
100	0.548	25.5	23.4	17.5	20.6	13.0	16.1	12.1

Field of View = CCD Size / Optical Magnification

MEGAPIXEL VARI-FOCAL LENS

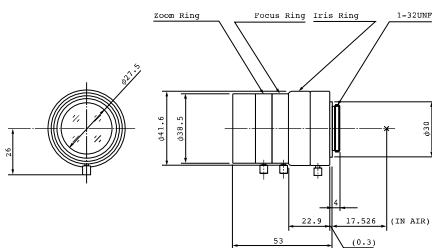
MACHINE VISION LENS



- Useful range of focal length for Machine Vision: f=12mm - 36mm
- Locking set screws for zoom, focus and iris

M3Z1228C-MP

- 2/3"
- 1MP
- VARI
- MANUAL



Focal Length	12mm - 36mm	
Max. Aperture Ratio	1:2.8	
Max. Image Format	8.8mm x 6.6mm (φ 11mm)	
Operation Range	Iris	F2.8 - F16C
	Focus	0.2m - Inf.(Tele) 0.05m - Inf.(Wide)
	Zoom	12mm - 36mm
Control	Iris	Manual
	Focus	Manual
	Zoom	Manual
Object Dimension at M.O.D.	12mm	4.0(H)cm x 3.0(V)cm 2/3"
	36mm	4.8(H)cm x 3.6(V)cm 2/3"
Angle of View	D	50.4° - 16.8° 37.5° - 12.5°
	H	2/3" 41.0° - 13.6° 1/2" 30.2° - 10.0°
	V	31.2° - 10.4° 22.8° - 7.6°
Operating Temperature	-10°C ~ +50°C	

Effective Lens Aperture	Front	φ 27.2mm	
	Rear	φ 12.1mm	
Back Focal Length	Tele	13.5mm	
	Wide	14.7mm	
Distortion	2/3"	1/2"	+3.5%(y=5.5)
			+1.7%(y=4.0)
		Wide	-2.6%(y=5.5)
Flange Back Length	17.526mm		
Mount	C-Mount		
Filter Size	M35.5 P=0.5mm		
Dimensions	φ 41.6mm x 53		
Weight	105g		

※ Please note M3Z1228C-MP is produced to order