

C-MOUNT  
MEGAPIXEL

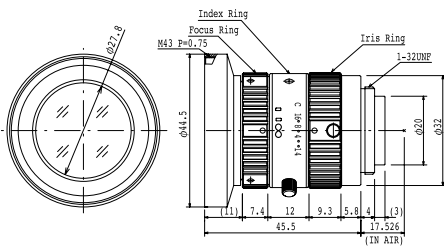
# MEGAPIXEL LENSES

FACTORY AUTOMATION LENS

- Captures full resolution of megapixel cameras
- Low distortion (Less than 1.0%)
- Locking set screws for focus and iris

- High contrast & sharp picture in all areas of the screen
- Compact design-Diameter 33.5mm (H0514-MP : 44.5mm)

## H0514-MP2



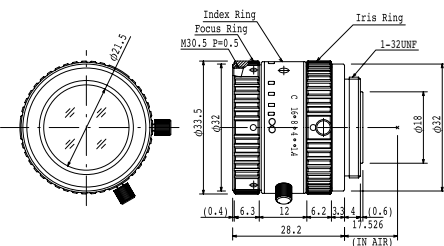
Focal Length	5mm		
Max. Aperture Ratio	1:1.4		
Max. Image Format	6.4mm x 4.8mm (φ8mm)		
Operation Range	Iris	F1.4 - F16C	
	Focus	0.1m - 0.9m	
Control	Iris	Manual	
	Focus	Manual	
Object Dimension at M.O.D.	15.0(H)cm x 11.1(V)cm 1/2"		
Angle of View	D	76.7°	62.3°
		51.4°	39.5°
	H	1/2"	1/3"
	V		
Operating Temperature	-10°C ~ +50°C		

Distortion	1/2"	-0.48% (y=4.0)	1/3"	-2.26% (y=3.0)
BackFocal Length	10.8mm (WD=900mm)			
Flange Back Length	17.526mm			
Mount	C-Mount			
Filter Size	M43 P=0.75mm			
Dimensions	φ 44.5mm x 45.5mm			
Weight	102g			

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)			
			1/2"		1/3"	
			H	V	H	V
900	0.006X	-	1179.8	882.3	882.3	657.2
850	0.006X	-	1115.4	834.2	834.2	621.3
800	0.006X	-	1051.0	786.0	786.0	585.4
750	0.007X	-	986.6	737.8	737.8	549.5
700	0.007X	-	922.3	689.6	689.6	513.6
650	0.008X	-	857.9	641.4	641.4	477.7
600	0.008X	-	793.5	593.2	593.2	441.8
550	0.009X	-	729.1	545.0	545.0	405.9
500	0.010X	-	664.7	496.9	496.9	370.0
450	0.011X	-	600.3	448.7	448.7	334.1
400	0.012X	-	535.9	400.5	400.5	298.2
350	0.014X	-	471.5	352.3	352.3	262.3
300	0.016X	-	407.1	304.1	304.1	226.4
250	0.019X	-	342.7	255.9	255.9	190.5
200	0.024X	-	278.4	207.8	207.8	154.6
150	0.031X	-	214.0	159.6	159.6	118.7
100	0.044X	-	149.6	111.4	111.4	82.8

Field of View = CCD Size / Optical Magnification

## M0814-MP2



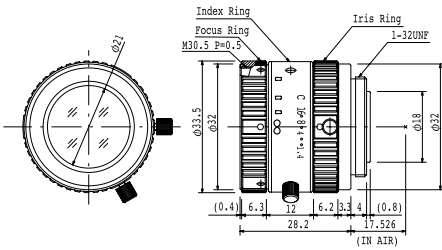
Focal Length	8mm		
Max. Aperture Ratio	1:1.4		
Max. Image Format	8.8mm x 6.6mm (φ11mm)		
Operation Range	Iris	F1.4 - F16C	
	Focus	0.1m - Inf.	
Control	Iris	Manual	
	Focus	Manual	
Object Dimension at M.O.D.	12.1(H)cm x 9.0(V)cm 2/3"		
Angle of View	D	67.1°	51.9°
		43.7°	32.4°
	H	2/3"	1/2"
	V		
Operating Temperature	-10°C ~ +50°C		

Distortion	2/3"	-0.1% (y=5.5)	1/2"	-1.1% (y=4.0)
BackFocal Length	13.1mm (Inf)			
Flange Back Length	17.526mm			
Mount	C-Mount			
Filter Size	M30.5 P=0.5mm			
Dimensions	φ 33.5mm x 28.2mm			
Weight	63g			

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)			
			2/3"		1/2"	
			H	V	H	V
900	0.009X	-	976.8	731.5	709.1	530.1
850	0.010X	-	923.3	691.4	670.2	501.0
800	0.010X	-	869.8	651.3	631.4	471.9
750	0.011X	-	816.3	611.2	592.5	442.8
700	0.012X	-	762.8	571.1	553.6	413.8
650	0.013X	-	709.3	531.0	514.7	384.7
600	0.014X	-	655.8	490.9	475.8	355.6
550	0.015X	-	602.3	450.8	437.0	326.5
500	0.016X	-	548.8	410.7	398.1	297.5
450	0.018X	-	495.3	370.6	359.2	268.4
400	0.020X	-	441.8	330.5	320.3	239.3
350	0.023X	-	388.3	290.4	281.4	210.2
300	0.027X	-	334.8	250.3	242.6	181.2
250	0.032X	-	281.2	210.2	203.7	152.1
200	0.039X	-	227.7	170.0	164.8	123.0
150	0.052X	-	174.2	129.9	125.9	93.9
100	0.075X	-	120.7	89.8	87.0	64.9

Field of View = CCD Size / Optical Magnification

# M1214-MP2



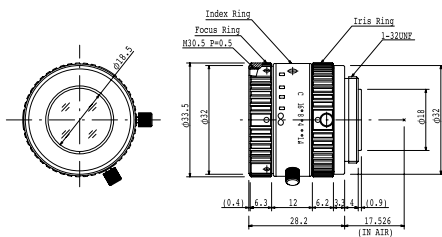
Focal Length	12mm			
Max. Aperture Ratio	1:1.4			
Max. Image Format	8.8mm x 6.6mm (φ11mm)			
Operation Range	Iris	F1.4 - F16C		
	Focus	0.15m - Inf.		
Control	Iris	Manual		
	Focus	Manual		
Object Dimension at M.O.D.	12.1(H)cm x 9.0(V)cm 2/3"			
Angle of View	D	2/3"	49.2°	37.0°
			40.4°	
	V	30.8°	22.7°	
Operating Temperature	-10° C ~ +50° C			

Distortion	2/3"	-0.1% (y=5.5)	1/2"	-0.35% (y=4.0)
Back Focal Length	13.1mm (Inf)			
Flange Back Length	17.526mm			
Mount	C-Mount			
Filter Size	M30.5 P=0.5mm			
Dimensions	φ 33.5mm x 28.2mm			
Weight	62g			

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)			
			2/3"		1/2"	
			H	V	H	V
900	0.013X	-	672.7	504.0	488.7	366.0
850	0.014X	-	635.9	476.4	461.9	345.9
800	0.015X	-	599.1	448.9	435.2	325.9
750	0.016X	-	562.4	421.3	408.4	305.9
700	0.017X	-	525.6	393.7	381.7	285.8
650	0.018X	-	488.8	366.1	355.0	265.8
600	0.020X	-	452.1	338.5	328.2	245.7
550	0.021X	-	415.3	311.0	301.5	225.7
500	0.023X	-	378.5	283.4	274.7	205.7
450	0.026X	-	341.7	255.8	248.0	185.6
400	0.029X	-	305.0	228.2	221.2	165.6
350	0.033X	-	268.2	200.6	194.5	145.6
300	0.038X	-	231.4	173.0	167.7	125.5
250	0.046X	-	194.7	145.5	141.0	105.5
200	0.056X	-	157.9	117.9	114.3	85.4
150	0.074X	-	121.1	90.3	87.5	65.4
100	0.106X	0.5	84.3	62.7	60.8	45.4

Field of View = CCD Size / Optical Magnification

# M1614-MP2



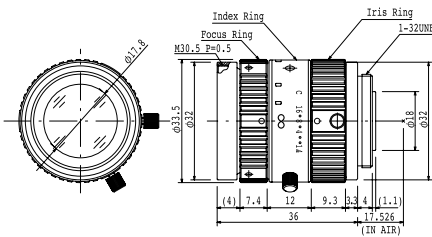
Focal Length	16mm			
Max. Aperture Ratio	1:1.4			
Max. Image Format	8.8mm x 6.6mm (φ11mm)			
Operation Range	Iris	F1.4 - F16C		
	Focus	0.3m - Inf.		
Control	Iris	Manual		
	Focus	Manual		
Object Dimension at M.O.D.	17.2(H)cm x 12.9(V)cm 2/3"			
Angle of View	D	2/3"	38.0°	28.2°
			30.8°	
	V	23.4°	17.1°	
Operating Temperature	-10° C ~ +50° C			

Distortion	2/3"	-0.1% (y=5.5)	1/2"	-0.3% (y=4.0)
Back Focal Length	13.1mm (Inf)			
Flange Back Length	17.526mm			
Mount	C-Mount			
Filter Size	M30.5 P=0.5mm			
Dimensions	φ 33.5mm x 28.2mm			
Weight	60g			

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)			
			2/3"		1/2"	
			H	V	H	V
900	0.018X	-	503.2	376.8	365.4	273.7
850	0.019X	-	475.6	356.2	345.3	258.6
800	0.020X	-	448.0	335.5	325.3	243.6
750	0.021X	-	420.4	314.8	305.2	228.6
700	0.023X	-	392.8	294.1	285.2	213.6
650	0.024X	-	365.2	273.4	265.1	198.5
600	0.026X	-	337.6	252.8	245.1	183.5
550	0.029X	-	310.0	232.1	225.0	168.5
500	0.031X	-	282.5	211.4	204.9	153.5
450	0.035X	-	254.9	190.7	184.9	138.4
400	0.039X	-	227.3	170.0	164.8	123.4
350	0.044X	-	199.7	149.4	144.8	108.4
300	0.052X	-	172.1	128.7	124.7	93.4
250	0.061X	-	144.5	108.0	104.7	78.3
200	0.076X	-	116.9	87.3	84.6	63.3
150	0.100X	0.5	89.3	66.6	64.6	48.3
100	0.145X	1.0	61.7	45.9	44.5	33.2

Field of View = CCD Size / Optical Magnification

## M2514-MP2



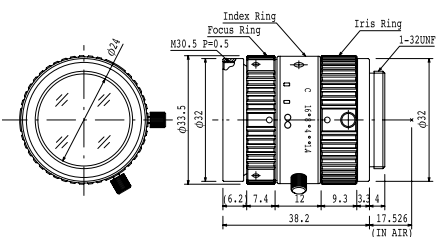
Focal Length	25mm		
Max. Aperture Ratio	1:1.4		
Max. Image Format	8.8mm x 6.6mm (φ11mm)		
Operation Range	Iris	F1.4 - F16C	
	Focus	0.3m - Inf.	
Control	Iris	Manual	
	Focus	Manual	
Object Dimension at M.O.D.	10.6(H)cm x 7.9(V)cm 2/3"		
Angle of View	D	24.9°	18.2°
		20.0°	14.6°
	V	15.1°	11.0°
Operating Temperature	-10°C ~ +50°C		

Distortion	2/3"	-0.3% (y=5.5)	1/2"	-0.1% (y=4.0)
Back Focal Length	13.1mm (Inf)			
Flange Back Length	17.526mm			
Mount	C-Mount			
Filter Size	M30.5 P=0.5mm			
Dimensions	φ 33.5mm x 36.0mm			
Weight	71g			

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)			
			2/3"		1/2"	
			H	V	H	V
900	0.028X	-	317.5	237.7	230.5	172.7
850	0.029X	-	299.9	224.5	217.7	163.1
800	0.031X	-	282.3	211.3	204.8	153.5
750	0.033X	-	264.6	198.1	192.0	143.9
700	0.036X	-	247.0	184.9	179.2	134.3
650	0.039X	-	229.4	171.6	166.4	124.7
600	0.042X	-	211.8	158.4	153.6	115.1
550	0.046X	-	194.1	145.2	140.8	105.5
500	0.050X	-	176.5	132.0	128.0	95.9
450	0.056X	-	158.9	118.8	115.2	86.3
400	0.063X	-	141.2	105.6	102.4	76.7
350	0.072X	-	123.6	92.4	89.6	67.1
300	0.084X	-	106.0	79.2	76.8	57.5
250	0.100X	-	88.3	66.0	63.9	47.9
200	0.126X	-	70.7	52.7	51.1	38.3
150	0.168X	-	53.0	39.5	38.3	28.7
100	0.253X	1.5	35.3	26.3	25.5	19.0

Field of View = CCD Size / Optical Magnification

## M3514-MP



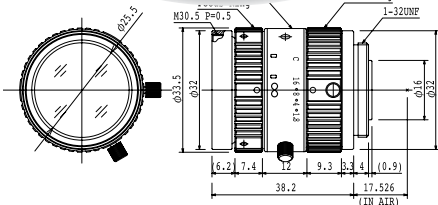
Focal Length	35mm		
Max. Aperture Ratio	1:1.4		
Max. Image Format	8.8mm x 6.6mm (φ11mm)		
Operation Range	Iris	F1.4 - F16C	
	Focus	0.3m - Inf.	
Control	Iris	Manual	
	Focus	Manual	
Object Dimension at M.O.D.	8.1(H)cm x 6(V)cm 2/3"		
Angle of View	D	17.3°	12.6°
		13.9°	10.1°
	V	10.4°	7.6°
Operating Temperature	-10°C ~ +50°C		

Distortion	2/3"	-0.8% (y=5.5)	1/2"	-0.4% (y=4.0)
Back Focal Length	17.1mm (WD=400mm)			
Flange Back Length	17.526mm			
Mount	C-Mount			
Filter Size	M30.5 P=0.5mm			
Dimensions	φ 33.5mm x 38.2mm			
Weight	87g			

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)			
			2/3"		1/2"	
			H	V	H	V
900	0.037	-	236.2	176.9	171.5	128.6
850	0.040	-	223.2	167.2	162.1	121.5
800	0.042	-	210.3	157.5	152.7	114.5
750	0.045	-	197.3	147.8	143.3	107.4
700	0.048	-	184.3	138.1	133.9	100.3
650	0.052	-	171.4	128.4	124.5	93.3
600	0.056	-	158.4	118.6	115.0	86.2
550	0.061	-	145.5	108.9	105.6	79.1
500	0.067	-	132.5	99.2	96.2	72.1
450	0.074	-	119.6	89.5	86.8	65.0
400	0.083	-	106.6	79.8	77.4	58.0
350	0.094	-	93.7	70.1	67.9	50.9
300	0.110	-	80.7	60.4	58.5	43.8
250	0.131	1	67.7	50.6	49.1	36.8
200	0.162	2	54.7	40.9	39.7	29.7
150	0.213	5	41.8	31.2	30.2	22.6
100	0.310	7	28.7	21.4	20.8	15.5

Field of View = CCD Size / Optical Magnification

# M5018-MP2



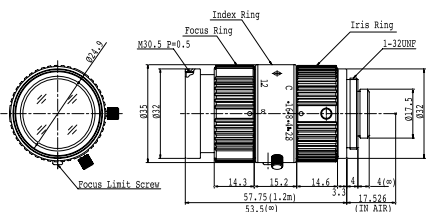
Focal Length	50mm		
Max. Aperture Ratio	1:1.8		
Max. Image Format	8.8mm x 6.6mm (φ11mm)		
Operation Range	Iris	F1.8 - F16C	
	Focus	0.5m - Inf.	
Control	Iris	Manual	
	Focus	Manual	
Object Dimension at M.O.D.	8.7(H)cm x 6.5(V)cm 2/3"		
Angle of View	D	13.1°	9.5°
	H	2/3" 10.5°	1/2" 7.6°
	V	7.9°	5.7°
Operating Temperature	-10° C ~ +50° C		

Distortion	2/3"	-0.3% (y=5.5)	1/2"	-0.2% (y=4.0)
Back Focal Length	13.1mm (Inf)			
Flange Back Length	17.526mm			
Mount	C-Mount			
Filter Size	M30.5 P=0.5mm			
Dimensions	φ 33.5mm x 38.2mm			
Weight	85g			

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)			
			2/3"		1/2"	
			H	V	H	V
900	0.055X	-	160.8	120.4	116.7	87.5
850	0.058X	-	151.6	113.5	110.1	82.5
800	0.062X	-	142.4	106.6	103.4	77.5
750	0.066X	-	133.2	99.7	96.7	72.5
700	0.071X	-	124.0	92.9	90.0	67.5
650	0.077X	-	114.8	86.0	83.4	62.5
600	0.084X	-	105.6	79.1	76.7	57.5
550	0.092X	-	96.5	72.2	70.1	52.5
500	0.101X	-	87.3	65.3	63.3	47.5
450	0.113X	0.5	78.1	58.4	56.7	42.5
400	0.128X	1.5	68.9	51.6	50.0	37.5
350	0.148X	2.5	59.7	44.7	43.3	32.5
300	0.175X	3.5	50.5	37.8	36.6	27.4
250	0.214X	5.5	41.3	30.9	30.0	22.4
200	0.276X	8.5	32.1	24.0	23.3	17.4
150	0.387X	14.0	22.9	17.1	16.6	12.4
100	0.647X	26.5	13.6	10.2	9.9	7.4

Field of View = CCD Size / Optical Magnification

# M7528-MP



Focal Length	75mm		
Max. Aperture Ratio	1:2.8		
Max. Image Format	8.8mm x 6.6mm (φ11mm)		
Operation Range	Iris	F2.8 - F16C	
	Focus	0.3m - Inf. (※)	
Control	Iris	Manual	
	Focus	Manual	
Object Dimension at M.O.D.	4.1(H)cm x 3.1(V)cm 2/3"		
Angle of View	D	8.5°	6.2°
	H	2/3" 6.8°	1/2" 5°
	V	5.1°	3.7°
Operating Temperature	-10° C ~ +50° C		

Distortion	2/3"	-0.4% (y=5.5)	1/2"	-0.2% (y=4.0)
Back Focal Length	21.5mm (WD=400mm)			
Flange Back Length	17.526mm			
Mount	C-Mount			
Filter Size	M30.5 P=0.5mm			
Dimensions	φ 35mm x 57.75mm			
Weight	113g			

※ Factory setting is 0.3-1.2m. Focus can be adjusted to infinity by removing "Focus Limit Screw".

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)			
			2/3"		1/2"	
			H	V	H	V
900	0.077	-	113.8	85.4	82.8	62.1
850	0.082	-	107.8	80.8	78.4	58.8
800	0.086	-	101.7	76.3	74.0	55.5
750	0.092	-	95.7	71.8	69.6	52.2
700	0.098	-	89.6	67.2	65.2	48.9
650	0.105	-	83.6	62.7	60.8	45.6
600	0.114	-	77.6	58.1	56.4	42.3
550	0.123	-	71.5	53.6	52.0	39.0
500	0.135	-	65.5	49.1	47.6	35.7
450	0.148	-	59.4	44.5	43.2	32.4
400	0.165	-	53.4	40.0	38.8	29.1
350	0.187	-	47.3	35.4	34.4	25.8
300	0.214	-	41.3	30.9	30.0	22.5
250	0.251	5	35.2	26.4	25.6	19.1
200	0.304	7	29.2	21.8	21.2	15.8
150	0.384	13	23.1	17.3	16.8	12.5
100	0.522	23	17.1	12.7	12.3	9.2

Field of View = CCD Size / Optical Magnification

C-MOUNT  
MEGAPIXEL

# 5 MEGAPIXEL ULTRA LOW DISTORTION LENSES

FACTORY AUTOMATION LENS

- Ultra low distortion (optical distortion 0.1% or less)
- Higher relative illumination rate
- Compact design

- Locking set screws for focus and iris

**NEW**

## M0824-MPW2

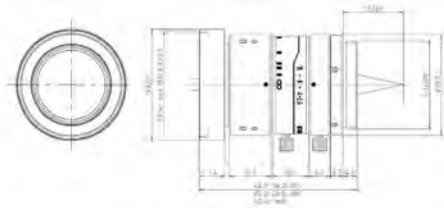


Focal Length	8mm	
Max. Aperture Ratio	1:2.4	
Max. Image Format	8.8mm x 6.6mm (φ 11mm)	
Operation Range	Iris	F2.4 - F16.0
	Focus	0.05m - Inf.
Control	Iris	Manual
	Focus	Manual
Object Dimension at M.O.D.	5.4cm x 7.4cm 2/3"	
Angle of View	D	69.32°
	H	57.80°
	V	44.36°

Distortion	2/3" 1.87%(y=5.5)	1/1.8" -1.55%(y=4.32)	1/2" -1.42%(y=4.0)
Back Focal Length	13.7mm(WD=300mm)		
Flange Back Length	17.526mm		
Mount	C-Mount		
Filter Size	M32.0 P=0.5mm		
Dimensions	φ 32mm x 45.71 mm		
Weight	80.0g		

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)					
			2/3"		1/1.8"		1/2"	
			H	V	H	V	H	V
900	-0.009	-	1011.1	755.4	791.6	591.5	732.2	547.3
850	-0.009	-	956.0	714.2	748.5	559.3	692.3	517.4
800	-0.010	-	900.9	673.0	705.3	527.0	652.3	487.6
750	-0.011	-	845.8	631.8	662.1	494.7	612.4	457.7
700	-0.011	-	790.7	590.6	618.9	462.5	572.5	427.8
650	-0.012	-	735.6	549.4	575.8	430.2	532.5	398.0
600	-0.013	-	680.4	508.2	532.6	397.9	492.6	368.1
550	-0.014	-	625.3	467.0	489.4	365.6	452.6	338.3
500	-0.016	-	570.0	425.6	446.0	333.2	412.6	308.2
450	-0.017	-	515.0	384.4	403.0	301.0	372.6	278.4
400	-0.019	-	459.8	343.2	359.8	268.8	332.6	248.6
350	-0.022	-	404.6	302.0	316.6	236.4	292.8	218.8
300	-0.026	-	349.6	260.8	273.4	204.2	252.8	188.8
250	-0.030	-	294.4	219.6	230.2	171.8	212.8	159.0
200	-0.037	-	239.4	178.4	187.0	139.6	173.0	129.2
150	-0.049	-	184.2	137.2	143.8	107.4	133.0	99.2
100	-0.070	-	129.0	96.0	100.6	75.0	93.0	69.4
50	-0.127	-	71.4	52.9	55.5	41.3	51.3	38.2

Field of View = CCD Size / Optical Magnification



**NEW**

## M1224-MPW2

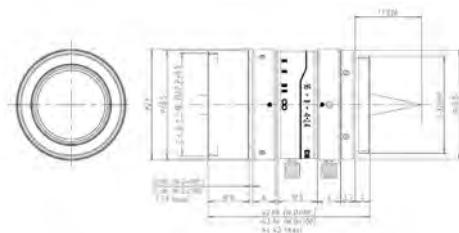


Focal Length	12mm	
Max. Aperture Ratio	1:2.4	
Max. Image Format	8.8mm x 6.6mm (φ 11mm)	
Operation Range	Iris	F2.4 - F16.0
	Focus	0.1m - Inf.
Control	Iris	Manual
	Focus	Manual
Object Dimension at M.O.D.	6.4cm x 8.5cm 2/3"	
Angle of View	D	48.6°
	H	39.8°
	V	30.4°

Distortion	2/3" -0.05%(y=5.5)	1/1.8" -0.34%(y=4.32)	1/2" -0.35%(y=4.0)
Back Focal Length	14.4mm(WD=300mm)		
Flange Back Length	17.526mm		
Mount	C-Mount		
Filter Size	M27.0 P=0.5mm		
Dimensions	φ 29mm x 42.68mm		
Weight	72.0g		

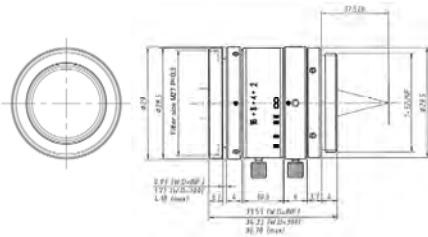
Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)					
			2/3"		1/1.8"		1/2"	
			H	V	H	V	H	V
900	-0.0131	-	671.2	503.7	527.5	395.5	488.4	366.1
850	-0.0138	-	634.6	476.2	498.7	373.9	461.8	346.1
800	-0.0147	-	598.0	448.7	469.9	352.3	435.1	326.1
750	-0.0157	-	561.4	421.2	441.1	330.7	408.4	306.1
700	-0.016	-	524.7	393.7	412.3	309.1	381.8	286.1
650	-0.018	-	488.1	366.2	383.5	287.5	355.1	266.1
600	-0.019	-	451.5	338.7	354.7	265.9	328.4	246.1
550	-0.021	-	414.8	311.2	325.9	244.3	301.7	226.1
500	-0.022	-	378.2	283.7	297.2	222.7	275.1	206.2
450	-0.026	-	341.6	256.2	268.4	201.1	248.4	186.2
400	-0.029	-	305.0	228.7	239.6	179.5	221.8	166.2
350	-0.033	-	268.3	201.2	210.8	157.9	195.1	146.2
300	-0.038	-	231.7	173.7	182.0	136.3	168.4	126.2
250	-0.045	-	195.1	146.2	153.2	114.7	141.8	106.2
200	-0.056	-	158.5	118.7	124.4	93.1	115.1	86.2
150	-0.073	-	121.8	91.2	95.6	71.5	88.4	66.2
100	-0.104	-	85.2	63.7	66.8	50.0	61.8	46.2

Field of View = CCD Size / Optical Magnification





# M1620-MPW2



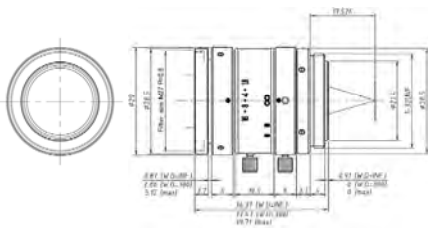
Focal Length	16mm	
Max. Aperture Ratio	1:2.0	
Max. Image Format	8.8mm x 6.6mm (φ 11mm)	
Operation Range	Iris	F2.0 - F16.0
	Focus	0.2m - Inf.
Control	Iris	Manual
	Focus	Manual
Object Dimension at M.O.D.	8.8cm x 11.74cm 2/3"	
Angle of View	D	37.7°
	H	2/3" 30.7°
	V	23.3°

Distortion	2/3" 0.09%(y=5.5)	1/1.8" -0.06%(y=4.32)	1/2" -0.07%(y=4.0)
Back Focal Length	14.7mm (WD=300mm)		
Flange Back Length	17.526mm		
Mount	C-Mount		
Filter Size	M27.0 P=0.5mm		
Dimensions	φ 29mm x 33.53mm		
Weight	53g		

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)					
			2/3"		1/1.8"		1/2"	
			H	V	H	V	H	V
900	-0.018	-	501.2	376.4	393.5	296.7	365.0	273.9
850	-0.019	-	473.8	355.8	372.0	280.5	345.1	258.9
800	-0.020	-	446.4	335.2	350.4	264.2	325.1	243.9
750	-0.021	-	418.9	314.6	328.9	248.0	305.1	228.9
700	-0.022	-	391.5	294.0	307.4	231.7	285.1	213.9
650	-0.024	-	364.1	273.4	285.8	215.5	265.2	198.9
600	-0.026	-	336.7	252.8	264.3	199.3	245.2	183.9
550	-0.028	-	309.3	232.2	242.8	183.0	225.2	168.9
500	-0.031	-	281.9	211.6	221.2	166.8	205.2	153.9
450	-0.035	-	254.5	191.0	199.7	150.5	185.2	138.9
400	-0.039	-	227.1	170.4	178.2	134.3	165.3	124.0
350	-0.044	-	199.7	149.8	156.6	118.0	145.3	109.0
300	-0.0511	-	172.2	129.2	135.1	101.8	125.3	94.0
250	-0.061	-	144.8	108.6	113.6	85.6	105.1	79.2
200	-0.075	-	117.4	88.0	92.0	69.3	85.3	64.0
150	-0.098	0.5	90.0	67.4	70.5	53.1	65.3	49.0
100	-0.142	0.5	62.5	46.8	48.9	36.8	45.4	34.0

Field of View = CCD Size / Optical Magnification

# M2518-MPW2



Focal Length	25mm	
Max. Aperture Ratio	1:1.8	
Max. Image Format	8.8mm x 6.6mm (φ 11mm)	
Operation Range	Iris	F1.8 - F16.0
	Focus	0.2m - Inf.
Control	Iris	Manual
	Focus	Manual
Object Dimension at M.O.D.	5.48cm x 7.31cm 2/3"	
Angle of View	D	24.6°
	H	2/3" 19.9°
	V	15.0°

Distortion	2/3" 0.03%(y=5.5)	1/1.8" -0.02%(y=4.32)	1/2" -0.02%(y=4.0)
Back Focal Length	13.8mm (WD=300mm)		
Flange Back Length	17.526mm		
Mount	C-Mount		
Filter Size	M27.0 P=0.5mm		
Dimensions	φ 29mm x 36.37mm		
Weight	60g		

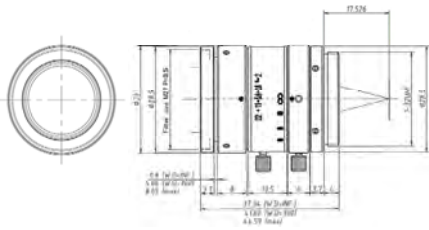
Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)					
			2/3"		1/1.8"		1/2"	
			H	V	H	V	H	V
900	-0.028	-	318.2	238.9	249.8	188.4	231.7	173.9
850	-0.029	-	300.7	225.8	236.0	178.0	219.0	164.3
800	-0.031	-	283.2	212.6	222.3	167.6	206.2	154.7
750	-0.033	-	265.7	199.5	208.5	157.2	193.5	145.2
700	-0.035	-	248.2	186.3	194.8	146.9	180.7	135.6
650	-0.038	-	230.7	173.2	181.0	136.5	168.0	126.0
600	-0.041	-	213.2	160.0	167.3	126.1	155.2	116.4
550	-0.045	-	195.7	146.9	153.6	115.8	142.5	106.9
500	-0.049	-	178.2	133.7	139.8	105.4	129.7	97.3
450	-0.055	-	160.7	120.6	126.1	95.0	116.9	87.7
400	-0.061	-	143.2	107.4	112.3	84.7	104.2	78.1
350	-0.070	-	125.7	94.3	98.6	74.3	91.4	68.6
300	-0.081	-	108.2	81.1	84.8	63.9	78.7	59.0
250	-0.097	-	90.7	68.0	71.1	53.5	65.9	49.4
200	-0.121	-	73.1	54.8	57.3	43.2	53.1	39.8
150	-0.159	-	55.6	41.6	43.5	32.8	40.4	30.3
100	-0.233	5	38.0	28.5	29.8	22.4	27.6	20.7

Field of View = CCD Size / Optical Magnification

- Ultra low distortion (optical distortion 0.1% or less)
- Higher relative illumination rate

- Compact design
- Locking set screws for focus and iris

## M3520-MPW2



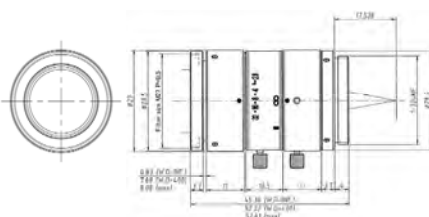
Focal Length	35mm		
Max. Aperture Ratio	1:2.0		
Max. Image Format	8.8mm x 6.6mm (φ 11mm)		
Operation Range	Iris	F2.0 - F22.0	
	Focus	0.2m - Inf.	
Control	Iris	Manual	
	Focus	Manual	
Object Dimension at MOD.	3.48cm x 4.63cm 2/3"		
Angle of View	D	17.8°	
	H	2/3"	14.3°
		1/1.8"	11.2°
V	1/2"	10.4°	
		10.7°	8.5°
Operating Temperature	-10° C ~ +50° C		

Distortion	2/3"	0.011%(y)=5.5	1/1.8"	0.010%(y)=4.32	1/2"	0.009%(y)=4.0
Back Focal Length	18.0mm (WD=300mm)					
Flange Back Length	17.526mm					
Mount	C-Mount					
Filter Size	M27.0 P=0.5mm					
Dimensions	φ 29mm x 37.34mm					
Weight	59g					

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)					
			2/3"		1/1.8"		1/2"	
			H	V	H	V	H	V
900	-0.040	-	221.8	166.4	174.0	131.2	161.4	121.1
850	-0.042	-	209.3	157.0	164.2	123.8	152.3	114.2
800	-0.045	-	196.7	147.6	154.3	116.3	143.2	107.4
750	-0.048	-	184.2	138.2	144.5	108.9	134.0	100.6
700	-0.051	-	171.7	128.8	134.7	101.5	124.9	93.7
650	-0.055	-	159.2	119.4	124.8	94.1	115.8	86.9
600	-0.060	-	146.6	110.0	115.0	98.7	106.7	80.0
550	-0.066	-	134.1	100.6	105.2	79.3	97.6	73.2
500	-0.072	-	121.6	91.2	95.3	71.9	88.4	66.3
450	-0.081	-	109.0	81.8	85.5	64.5	79.3	59.5
400	-0.091	-	96.5	72.4	75.7	57.0	70.2	52.7
350	-0.105	-	84.0	63.0	65.8	49.6	61.1	45.8
300	-0.123	-	71.4	53.6	56.0	42.2	52.0	39.0
250	-0.150	-	58.9	44.2	46.2	34.8	42.8	32.1
200	-0.190	-	46.3	34.8	36.3	27.4	33.7	25.3
150	-0.261	5	33.8	25.3	26.5	20.0	24.6	18.4
100	-0.417	10	21.2	15.9	16.6	12.5	15.4	11.5

Field of View = CCD Size / Optical Magnification

## M5028-MPW2



Focal Length	50mm		
Max. Aperture Ratio	1:2.8		
Max. Image Format	8.8mm x 6.6mm (φ 11mm)		
Operation Range	Iris	F2.8 - F32.0	
	Focus	0.4m - Inf.	
Control	Iris	Manual	
	Focus	Manual	
Object Dimension at MOD.	4.78cm x 6.38cm 2/3"		
Angle of View	D	12.5°	
	H	2/3"	10.0°
		1/1.8"	7.9°
V	1/2"	7.3°	
		7.5°	5.9°
Operating Temperature	-10° C ~ +50° C		

Distortion	2/3"	0.027%(y)=5.5	1/1.8"	0.017%(y)=4.32	1/2"	0.015%(y)=4.0
Back Focal Length	27.7mm (WD=400mm)					
Flange Back Length	17.526mm					
Mount	C-Mount					
Filter Size	M27.0 P=0.5mm					
Dimensions	φ 29mm x 45.36mm					
Weight	69g					

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View(mm)					
			2/3"		1/1.8"		1/2"	
			H	V	H	V	H	V
900	-0.058	-	151.7	113.8	118.9	89.6	110.3	82.7
850	-0.062	-	142.9	107.2	112.0	84.4	103.9	77.9
800	-0.066	-	134.1	100.6	105.1	79.2	97.5	73.1
750	-0.070	-	125.3	94.0	98.2	74.0	91.1	68.3
700	-0.075	-	116.5	87.4	91.3	68.9	84.7	63.6
650	-0.082	-	107.7	80.8	84.5	63.7	78.3	58.8
600	-0.089	-	98.9	74.2	77.6	58.5	71.9	54.0
550	-0.098	-	90.1	67.6	70.7	53.3	65.6	49.2
500	-0.108	-	81.3	61.0	63.8	48.1	59.2	44.4
450	-0.121	-	72.6	54.4	56.9	42.9	52.8	39.6
400	-0.138	-	63.8	47.8	50.0	37.7	46.4	34.8
350	-0.160	1	55.0	41.2	43.1	32.5	40.0	30.0
300	-0.191	5	46.2	34.6	36.2	27.3	33.6	25.2
250	-0.235	5	37.4	28.1	29.3	22.1	27.2	20.4
200	-0.308	10	28.6	21.5	22.4	16.9	20.8	15.6
150	-0.445	20	19.8	14.9	15.5	11.7	14.4	10.8
100	-0.801	40	11.0	8.2	8.6	6.5	8.0	6.0

Field of View = CCD Size / Optical Magnification