

2/3" 6MP  
MPW3



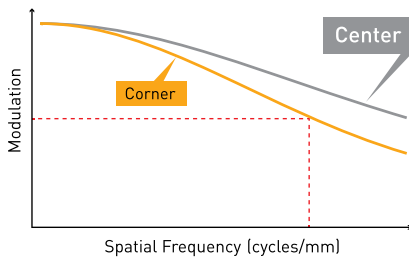
- ✓ Suitable for 2/3" 6 megapixel
- ✓ A variety of focal lengths from 5mm to 75mm
- ✓ Maintains high performance at long WD
- ✓ An ultra-compact  $\phi 29$  diameter with a nearly identical mechanical length
- ✓ Vibration resistance up to 5G

# MPW3 Series

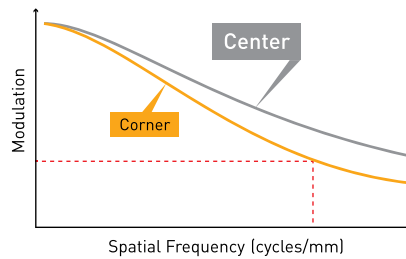
2/3" 6 MEGAPIXEL Machine Vision Lens

Model No.	Format	Focal Length	F No.	Working Distance	Weight
M0528-MPW3	2/3"	5mm	F2.8-F16	0.1m-Inf.	TBD
M0828-MPW3		8mm		0.1m-Inf.	58g
M1228-MPW3		12mm		0.1m-Inf.	60g
M1628-MPW3		16mm		0.25m-Inf.	37g
M2528-MPW3		25mm		0.2m-Inf.	42g
M3528-MPW3		35mm		0.25m-Inf.	48g
M5028-MPW3		50mm		0.3m-Inf.	65g
M7528-MPW3		75mm		0.4m-Inf.	102g

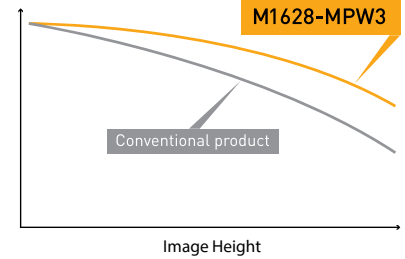
## NEW M1628-MPW3 MTF WD300mm



## Conventional Product MTF WD300mm



## Relative Illumination



NEW

## M0528-MPW3

- 2/3"
- 6MP
- FIX
- MANUAL
- WIDE

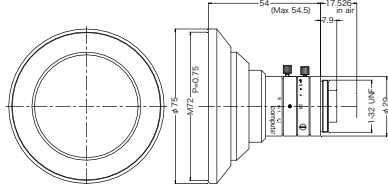


Focal Length	5mm			
Max. Aperture Ratio	1:2.8			
Max. Image Format	8.8mm x 6.6mm ( $\phi$ 11mm )			
Operation Range	Iris	F2.8 - F16.0		
	Focus	0.1m - Inf.		
Control	Iris	Manual		
	Focus	Manual		
Angle of View	D	94.6°	83.8°	71.4°
	H	2/3" 83.2°	1/1.8" 71.6°	1/2.5" 59.8°
	V	67.5°	58.3°	46.6°
Operating Temperature	-10°C ~ +50°C			

Optical Distortion	2/3"	0.03%( $\gamma=5.5$ )	1/1.8"	-2.14%( $\gamma=4.5$ )	1/2.5"	-2.72%( $\gamma=3.55$ )
Back Focal Length	9.2mm					
Flange Back Length	17.526mm					
Mount	C-Mount					
Filter Size	M72 P=0.75mm					
Dimensions	$\phi$ 75mm x 54mm					
Weight	TBD					

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View (mm)					
			2/3"		1/1.8"		1/2.5"	
			H	V	H	V	H	V
1000	0.005	-	1811.6	1361.5	1487.1	1108.3	1171.7	876.9
950	0.005	-	1723.0	1294.8	1414.3	1053.9	1114.2	833.9
900	0.006	-	1634.3	1228.1	1341.4	999.6	1056.8	790.8
850	0.006	-	1545.7	1161.4	1268.5	945.2	999.3	747.8
800	0.006	-	1457.0	1094.6	1195.7	890.9	941.9	704.8
750	0.007	-	1368.4	1027.9	1122.8	836.5	884.4	661.8
700	0.007	-	1279.8	961.2	1050.0	782.2	827.0	618.8
650	0.008	-	1191.1	894.4	977.1	727.9	769.5	575.8
600	0.008	-	1102.5	827.7	904.2	673.5	712.1	532.8
550	0.009	-	1013.8	761.0	831.4	619.2	654.6	489.8
500	0.010	-	925.2	694.2	758.5	564.8	597.2	446.7
450	0.011	-	836.6	627.5	685.7	510.5	539.7	403.7
400	0.012	-	747.9	560.8	612.8	456.1	482.3	360.7
350	0.014	-	659.3	494.0	539.9	401.8	424.8	317.7
300	0.016	-	570.6	427.3	467.1	347.4	367.4	274.7
250	0.019	-	482.0	360.6	394.2	293.1	309.9	231.7
200	0.023	-	393.3	293.8	321.3	238.7	252.5	188.7
150	0.030	-	304.7	227.1	248.5	184.4	195.0	145.7
100	0.043	-	216.0	160.4	175.6	130.0	137.6	102.6

Field of View = CCD Size / Optical Magnification



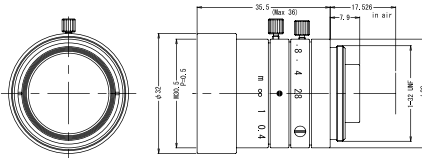
# 2/3" 6 MEGAPIXEL FIXED FOCAL LENS (MPW3 Series)

2/3" 6MP  
MPW3

**NEW**

## M0828-MPW3

- 2/3"
- 6MP
- FIX
- MANUAL



Focal Length	8mm	
Max. Aperture Ratio	1:2.8	
Max. Image Format	8.8mm x 6.6mm ( φ 11mm)	
Operation Range	Iris	F2.8 - F16.0
	Focus	0.1m - Inf.
Control	Iris	Manual
	Focus	Manual
Angle of View	D	68.5°
	H	57.0°
	V	44.2°
Operating Temperature	2/3"	57.7°
	1/1.8"	47.3°
	1/2.5"	38.5°
Operating Temperature	2/3"	47.2°
	1/1.8"	37.5°
	1/2.5"	29.4°

Optical Distortion	2/3" -1.80%(y=5.5)	1/1.8" -1.68%(y=4.5)	1/2.5" -1.28%(y=3.55)
Back Focal Length	10.1mm		
Flange Back Length	17.526mm		
Mount	C-Mount		
Filter Size	M30.5 P=0.5mm		
Dimensions	φ 32mm x 35.5mm		
Weight	58g		

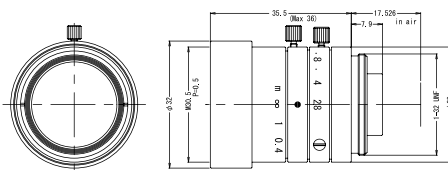
Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View (mm)					
			2/3"		1/1.8"		1/2.5"	
			H	V	H	V	H	V
1000	0.008	-	1099.4	820.0	896.0	668.7	706.4	530.9
950	0.009	-	1045.2	779.5	851.8	635.6	671.5	504.7
900	0.009	-	990.8	739.0	807.5	602.6	636.6	478.4
850	0.010	-	936.6	698.5	763.3	569.5	601.7	452.2
800	0.010	-	882.2	657.9	719.0	536.5	566.8	425.9
750	0.011	-	828.0	617.5	674.8	503.5	531.9	399.7
700	0.012	-	773.7	576.9	630.4	470.4	497.0	373.5
650	0.013	-	719.4	536.4	586.2	437.4	462.1	347.2
600	0.014	-	665.1	495.9	541.9	404.3	427.1	321.0
550	0.015	-	610.9	455.4	497.7	371.3	392.3	294.8
500	0.016	-	556.5	414.9	453.4	338.2	357.3	268.5
450	0.018	-	502.3	374.4	409.2	305.2	322.4	242.3
400	0.020	-	448.0	333.9	364.9	272.2	287.6	216.1
350	0.023	-	393.7	293.3	320.6	239.1	252.6	189.8
300	0.027	-	339.4	252.8	276.3	206.0	217.7	163.5
250	0.032	-	285.1	212.3	232.1	173.0	182.8	137.3
200	0.039	-	230.8	171.8	187.8	139.9	147.9	111.1
150	0.051	-	176.5	131.3	143.5	106.9	113.0	84.8
100	0.074	-	122.2	90.7	99.3	73.9	78.1	58.6

Field of View = CCD Size / Optical Magnification

**NEW**

## M1228-MPW3

- 2/3"
- 6MP
- FIX
- MANUAL



Focal Length	12mm	
Max. Aperture Ratio	1:2.8	
Max. Image Format	8.8mm x 6.6mm ( φ 11mm)	
Operation Range	Iris	F2.8 - F16.0
	Focus	0.1m - Inf.
Control	Iris	Manual
	Focus	Manual
Angle of View	D	49.3°
	H	40.3°
	V	30.8°
Operating Temperature	2/3"	40.8°
	1/1.8"	33.1°
	1/2.5"	26.7°
Operating Temperature	2/3"	33.0°
	1/1.8"	26.0°
	1/2.5"	20.3°

Optical Distortion	2/3" -0.10%(y=5.5)	1/1.8" 0.04%(y=4.5)	1/2.5" 0.00%(y=3.55)
Back Focal Length	9.2mm		
Flange Back Length	17.526mm		
Mount	C-Mount		
Filter Size	M27 P=0.5mm		
Dimensions	φ 29mm x 43.5mm		
Weight	60g		

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View (mm)					
			2/3"		1/1.8"		1/2.5"	
			H	V	H	V	H	V
1000	0.012	-	743.1	557.3	607.9	455.9	481.3	363.0
950	0.012	-	706.4	529.8	577.9	433.4	457.5	345.1
900	0.013	-	669.7	502.3	547.9	410.9	433.7	327.1
850	0.014	-	633.1	474.7	517.9	388.4	410.0	309.2
800	0.015	-	596.4	447.2	487.9	365.9	386.2	291.3
750	0.016	-	559.8	419.7	457.9	343.3	362.4	273.3
700	0.017	-	523.1	392.2	427.9	320.8	338.7	255.4
650	0.018	-	486.4	364.7	397.9	298.3	314.9	237.5
600	0.020	-	449.8	337.2	367.9	275.8	291.1	219.6
550	0.021	-	413.1	309.7	337.8	253.3	267.4	201.6
500	0.023	-	376.4	282.1	307.8	230.8	243.6	183.7
450	0.026	-	339.8	254.6	277.8	208.3	219.8	165.8
400	0.029	-	303.1	227.1	247.8	185.7	196.1	147.8
350	0.033	-	266.4	199.6	217.8	163.2	172.3	129.9
300	0.038	-	229.7	172.1	187.8	140.7	148.6	112.0
250	0.046	-	193.1	144.6	157.8	118.2	124.8	94.1
200	0.057	-	156.4	117.1	127.8	95.7	101.0	76.1
150	0.074	-	119.7	89.5	97.7	73.2	77.3	58.2
100	0.107	-	83.0	62.0	67.7	50.6	53.5	40.3

Field of View = CCD Size / Optical Magnification

2/3" 6MP  
MPW3

## 2/3" 6 MEGAPIXEL FIXED FOCAL LENS (MPW3 Series)

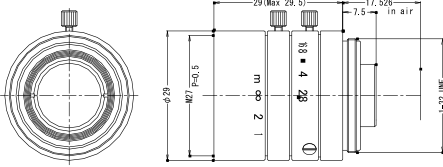
- Suitable for 2/3" 6 megapixel
- 5, 8, 12, 16, 25, 35, 50, 75mm 8 lens series
- Vibration resistance up to 5G

- Maintains high performance at long WD
- An ultra-compact Ø29 diameter with a nearly identical mechanical length

**NEW**

### M1628-MPW3

2/3"  
6MP  
FIX  
MANUAL



Focal Length	16mm			
Max. Aperture Ratio	1:2.8			
Max. Image Format	8.8mm x 6.6mm ( φ 11mm)			
Operation Range	Iris	F2.8 - F16.0		
	Focus	0.25m - Inf.		
Control	Iris	Manual		
	Focus	Manual		
Angle of View	D	37.8°	31.4°	25.0°
	H	2/3" 30.7°	1/1.8" 25.3°	1/2.5" 20.2°
	V	23.3°	19.2°	15.3°
Operating Temperature	-10°C ~ +50°C			

Optical Distortion	2/3" 0.47%(y=5.5)	1/1.8" 0.15%(y=4.5)	1/2.5" 0.03%(y=3.55)
Back Focal Length	10.3mm		
Flange Back Length	17.526mm		
Mount	C-Mount		
Filter Size	M27 P=0.5mm		
Dimensions	φ 29mm x 29mm		
Weight	37g		

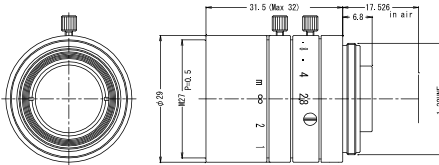
Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View (mm)					
			2/3"		1/1.8"		1/2.5"	
			H	V	H	V	H	V
1000	0.016	-	552.5	414.6	452.3	339.2	358.1	270.1
950	0.017	-	525.0	394.0	429.8	322.3	340.3	256.7
900	0.018	-	497.6	373.4	407.3	305.5	322.5	243.2
850	0.019	-	470.1	352.8	384.8	288.6	304.7	229.8
800	0.020	-	442.7	332.1	362.3	271.7	286.8	216.4
750	0.021	-	415.2	311.5	339.8	254.9	269.0	202.9
700	0.023	-	387.7	290.9	317.4	238.0	251.2	189.5
650	0.024	-	360.3	270.3	294.9	221.1	233.4	176.1
600	0.026	-	332.8	249.7	272.4	204.3	215.6	162.6
550	0.029	-	305.4	229.1	249.9	187.4	197.8	149.2
500	0.032	-	277.9	208.5	227.4	170.5	180.0	135.8
450	0.035	-	250.5	187.8	204.9	153.6	162.2	122.3
400	0.040	-	223.0	167.2	182.5	136.8	144.4	108.9
350	0.045	-	195.5	146.6	160.0	119.9	126.6	95.4
300	0.052	-	168.1	126.0	137.5	103.0	108.8	82.0
250	0.063	-	140.6	105.4	115.0	86.2	91.0	68.6
200	0.078	0.3	113.2	84.8	92.5	69.3	73.2	55.1
150	0.103	0.6	85.7	64.1	70.0	52.4	55.3	41.7
100	0.153	1.5	58.2	43.5	47.5	35.5	37.5	28.3

Field of View = CCD Size / Optical Magnification

**NEW**

### M2528-MPW3

2/3"  
6MP  
FIX  
MANUAL



Focal Length	25mm			
Max. Aperture Ratio	1:2.8			
Max. Image Format	8.8mm x 6.6mm ( φ 11mm)			
Operation Range	Iris	F2.8 - F16.0		
	Focus	0.2m - Inf.		
Control	Iris	Manual		
	Focus	Manual		
Angle of View	D	24.6°	20.3°	16.1°
	H	2/3" 19.9°	1/1.8" 16.3°	1/2.5" 13.0°
	V	15.0°	12.3°	9.8°
Operating Temperature	-10°C ~ +50°C			

Optical Distortion	2/3" 0.77%(y=5.5)	1/1.8" 0.49%(y=4.5)	1/2.5" 0.29%(y=3.55)
Back Focal Length	11.5mm		
Flange Back Length	17.526mm		
Mount	C-Mount		
Filter Size	M27 P=0.5mm		
Dimensions	φ 29mm x 31.5mm		
Weight	42g		

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View (mm)					
			2/3"		1/1.8"		1/2.5"	
			H	V	H	V	H	V
1000	0.025	-	351.1	263.7	287.6	215.9	227.8	171.9
950	0.026	-	333.6	250.5	273.2	205.1	216.4	163.4
900	0.028	-	316.1	237.3	258.8	194.3	205.1	154.8
850	0.029	-	298.6	224.2	244.5	183.5	193.7	146.2
800	0.031	-	281.0	211.0	230.1	172.7	182.3	137.6
750	0.033	-	263.5	197.8	215.8	161.9	170.9	129.0
700	0.036	-	246.0	184.7	201.4	151.2	159.5	120.4
650	0.038	-	228.5	171.5	187.1	140.4	148.2	111.8
600	0.042	-	210.9	158.3	172.7	129.6	136.8	103.2
550	0.045	-	193.4	145.2	158.3	118.8	125.4	94.6
500	0.050	-	175.9	132.0	144.0	108.0	114.0	86.0
450	0.056	-	158.4	118.8	129.6	97.2	102.6	77.4
400	0.062	-	140.8	105.7	115.3	86.5	91.3	68.9
350	0.071	-	123.3	92.5	100.9	75.7	79.9	60.3
300	0.083	-	105.8	79.3	86.5	64.9	68.5	51.7
250	0.100	-	88.2	66.1	72.2	54.1	57.1	43.1
200	0.125	-	70.7	53.0	57.8	43.3	45.7	34.5
150	0.166	1.0	53.1	39.8	43.4	32.5	34.3	25.9
100	0.249	3.0	35.6	26.6	29.0	21.7	22.9	17.3

Field of View = CCD Size / Optical Magnification

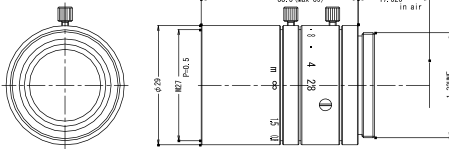
# 2/3" 6 MEGAPIXEL FIXED FOCAL LENS (MPW3 Series)

2/3" 6MP  
MPW3

**NEW**

## M3528-MPW3

- 2/3"
- 6MP
- FIX
- MANUAL



Focal Length	35mm			
Max. Aperture Ratio	1:2.8			
Max. Image Format	8.8mm x 6.6mm ( φ 11mm)			
Operation Range	Iris	F2.8 - F16.0		
	Focus	0.25m - Inf.		
Control	Iris	Manual		
	Focus	Manual		
Angle of View	D	17.9°	14.4°	9.8°
	H	2/3" 14.3°	1/1.8" 11.7°	1/2.5" 7.8°
	V	10.8°	8.7°	5.9°
Operating Temperature	-10°C ~ +50°C			

Optical Distortion	2/3"	0.06%(γ=5.5)	1/1.8"	0.04%(γ=4.5)	1/2.5"	0.03%(γ=3.55)
Back Focal Length	18.0mm					
Flange Back Length	17.526mm					
Mount	C-Mount					
Filter Size	M27 P=0.5mm					
Dimensions	φ 29mm x 38.5mm					
Weight	48g					

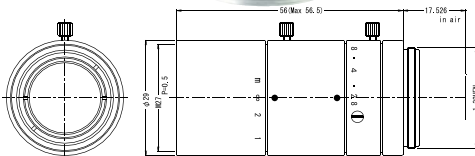
Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View (mm)					
			2/3"		1/1.8"		1/2.5"	
			H	V	H	V	H	V
1000	0.036	-	247.9	185.9	202.8	152.1	160.5	121.1
950	0.037	-	235.3	176.5	192.5	144.4	152.4	115.0
900	0.040	-	222.8	167.1	182.3	136.7	144.3	108.8
850	0.042	-	210.2	157.6	172.0	129.0	136.1	102.7
800	0.045	-	197.6	148.2	161.7	121.2	128.0	96.5
750	0.048	-	185.1	138.8	151.4	113.5	119.8	90.4
700	0.051	-	172.5	129.3	141.1	105.8	111.7	84.3
650	0.055	-	159.9	119.9	130.8	98.1	103.5	78.1
600	0.060	-	147.3	110.5	120.5	90.4	95.4	72.0
550	0.065	-	134.8	101.0	110.2	82.7	87.3	65.8
500	0.072	-	122.2	91.6	100.0	74.9	79.1	59.7
450	0.080	-	109.6	82.2	89.7	67.2	71.0	53.5
400	0.091	-	97.0	72.8	79.4	59.5	62.8	47.4
350	0.104	-	84.5	63.3	69.1	51.8	54.7	41.3
300	0.123	-	71.9	53.9	58.8	44.1	46.5	35.1
250	0.149	-	59.3	44.5	48.5	36.4	38.4	29.0
200	0.189	1.5	46.7	35.0	38.2	28.6	30.2	22.8
150	0.259	4.0	34.1	25.6	27.9	20.9	22.1	16.6
100	0.412	9.5	21.5	16.1	17.6	13.2	13.9	10.5

Field of View = CCD Size / Optical Magnification

**NEW**

## M5028-MPW3

- 2/3"
- 6MP
- FIX
- MANUAL



Focal Length	50mm			
Max. Aperture Ratio	1:2.8			
Max. Image Format	8.8mm x 6.6mm ( φ 11mm)			
Operation Range	Iris	F2.8 - F16.0		
	Focus	0.3m - Inf.		
Control	Iris	Manual		
	Focus	Manual		
Angle of View	D	12.5°	10.2°	8.1°
	H	2/3" 10.0°	1/1.8" 8.2°	1/2.5" 6.5°
	V	7.5°	6.2°	4.9°
Operating Temperature	-10°C ~ +50°C			

Optical Distortion	2/3"	0.00%(γ=5.5)	1/1.8"	0.00%(γ=4.5)	1/2.5"	0.00%(γ=3.55)
Back Focal Length	26.3mm					
Flange Back Length	17.526mm					
Mount	C-Mount					
Filter Size	M27 P=0.5mm					
Dimensions	φ 29mm x 56mm					
Weight	65g					

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View (mm)					
			2/3"		1/1.8"		1/2.5"	
			H	V	H	V	H	V
1000	0.052	-	168.9	126.8	138.3	103.7	109.5	82.6
950	0.055	-	160.2	120.2	131.1	98.4	103.8	78.3
900	0.058	-	151.4	113.6	123.9	93.0	98.1	74.0
850	0.062	-	142.6	107.0	116.7	87.6	92.4	69.8
800	0.066	-	133.8	100.4	109.6	82.2	86.8	65.5
750	0.070	-	125.1	93.9	102.4	76.8	81.1	61.2
700	0.075	-	116.3	87.3	95.2	71.4	75.4	56.9
650	0.082	-	107.5	80.7	88.0	66.0	69.7	52.6
600	0.089	-	98.8	74.1	80.8	60.6	64.0	48.3
550	0.098	-	90.0	67.5	73.6	55.3	58.3	44.0
500	0.108	-	81.2	60.9	66.5	49.9	52.6	39.7
450	0.121	-	72.4	54.3	59.3	44.5	46.9	35.4
400	0.138	-	63.7	47.8	52.1	39.1	41.3	31.1
350	0.160	-	54.9	41.2	44.9	33.7	35.6	26.8
300	0.191	-	46.1	34.6	37.7	28.3	29.9	22.5
250	0.236	2.2	37.3	28.0	30.5	22.9	24.2	18.2
200	0.308	6.0	28.5	21.4	23.4	17.5	18.5	14.0
150	0.445	13.0	19.8	14.8	16.2	12.1	12.8	9.7
100	0.802	30.5	11.0	8.2	9.0	6.7	7.1	5.4

Field of View = CCD Size / Optical Magnification

2/3" 6MP  
MPW3

## 2/3" 6 MEGAPIXEL FIXED FOCAL LENS (MPW3 Series)

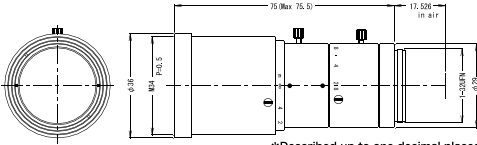
- Suitable for 2/3" 6 megapixel
- 5, 8, 12, 16, 25, 35, 50, 75mm 8 lens series
- Vibration resistance up to 5G

- Maintains high performance at long WD
- An ultra-compact Ø29 diameter with a nearly identical mechanical length

**NEW**

### M7528-MPW3

2/3"  
6MP  
FIX  
MANUAL  
TELE



\*Described up to one decimal places.

Focal Length		75mm					
Max. Aperture Ratio		1:2.8					
Max. Image Format		8.8mm x 6.6mm ( φ 11mm)					
Operation Range	Iris	F2.8 - F16.0					
	Focus	0.4m - Inf.					
Control	Iris	Manual					
	Focus	Manual					
Angle of View	D	8.4°		6.9°		5.4°	
	H	2/3"	6.7°	1/1.8"	5.5°	1/2.5"	4.3°
	V		5.0°		4.1°		3.3°
Operating Temperature		-10°C ~ +50°C					

Optical Distortion	2/3"	0.33%(γ=5.5)	1/1.8"	0.21%(γ=4.5)	1/2.5"	0.12%(γ=3.55)
Back Focal Length	14.6mm					
Flange Back Length	17.526mm					
Mount	C-Mount					
Filter Size	M34 P=0.5mm					
Dimensions	φ 36mm x 75mm					
Weight	102g					

Working Distance (mm)	Optical Magnification	Extension Ring (mm)	Field of View (mm)					
			2/3"		1/1.8"		1/2.5"	
			H	V	H	V	H	V
1000	0.071	-	123.1	92.3	100.7	75.5	79.7	60.1
950	0.075	-	117.2	87.9	95.9	71.9	75.9	57.3
900	0.079	-	111.4	83.5	91.1	68.3	72.1	54.4
850	0.083	-	105.5	79.1	86.3	64.7	68.3	51.5
800	0.088	-	99.7	74.7	81.5	61.1	64.5	48.7
750	0.094	-	93.8	70.3	76.7	57.5	60.7	45.8
700	0.100	-	87.9	65.9	71.9	53.9	56.9	43.0
650	0.107	-	82.1	61.5	67.1	50.3	53.1	40.1
600	0.116	-	76.2	57.1	62.4	46.7	49.3	37.2
550	0.125	-	70.4	52.8	57.6	43.2	45.6	34.4
500	0.137	-	64.5	48.4	52.8	39.6	41.8	31.5
450	0.150	-	58.7	44.0	48.0	36.0	38.0	28.6
400	0.167	-	52.8	39.6	43.2	32.4	34.2	25.8
350	0.188	1.5	46.9	35.2	38.4	28.8	30.4	22.9
300	0.215	3.5	41.1	30.8	33.6	25.2	26.6	20.0
250	0.251	6.0	35.2	26.4	28.8	21.6	22.8	17.2
200	0.301	10.0	29.3	22.0	24.0	18.0	19.0	14.3
150	0.377	16.0	23.5	17.6	19.2	14.4	15.2	11.4
100	0.503	25.0	17.6	13.2	14.4	10.8	11.4	8.6

Field of View = CCD Size / Optical Magnification