

# Resolv4K Zoom Field of View Matrix (mm)

Lens Attachment	Rear Adapter Mag		0.6875X	1X	1.375X	2X		
	Ideal Camera Format		2/3"	1"	4/3"	32mm (APS)		
	Pixel Resolution (µm)		2.24 - 5.47	3.26 - 7.95	4.48 - 10.93	6.51 - 15.90	Resolve Limit (µm)	Depth of Field (mm)
	W.D. (mm)	Format	Low-High	Low-High	Low-High	Low-High	Low-High	Low-High
0.25X 0.008 - 0.024 NA 1-81201	359.5	Mag.	0.10X - 0.77X	0.16X - 1.13X	0.22X - 1.55X	0.32X - 2.25X	40.85 - 14.13	7.41 - 0.89
		2/3" Sensor	100.00 - 14.22	68.75 - 9.78	50.00 - 7.11	34.38 - 5.17		
		1" Sensor	-	100.00 - 14.22	72.73 - 10.34	50.00 - 7.11		
		1.1" Sensor	-	110.00 - 15.64	80.00 - 11.38	55.00 - 7.82		
		4/3" Sensor	-	-	100.00 - 14.22	68.75 - 9.78		
		32mm	-	-	-	100.00 - 14.22		
0.5X 0.016 - 0.048 NA 1-81202	173	Mag.	0.22X - 1.55X	0.32X - 2.25X	0.44X - 3.09X	0.64X - 4.50X	20.43 - 7.06	1.85 - 0.22
		2/3" Sensor	50.00 - 7.11	34.38 - 4.89	25.00 - 3.56	17.19 - 2.44		
		1" Sensor	-	50.00 - 7.11	36.36 - 5.17	25.00 - 3.56		
		1.1" Sensor	-	55.00 - 7.82	40.00 - 5.69	27.50 - 3.91		
		4/3" Sensor	-	-	50.00 - 7.11	34.38 - 4.89		
		32mm	-	-	-	50.00 - 7.11		
0.75X 0.025 - 0.071 NA 1-81203	110	Mag.	0.33X - 2.32X	0.48X - 3.38X	0.66X - 4.64X	0.96X - 6.75X	13.62 - 4.71	0.82 - 0.10
		2/3" Sensor	33.33 - 4.74	22.92 - 3.26	16.67 - 2.37	11.46 - 1.63		
		1" Sensor	-	33.33 - 4.74	24.24 - 3.45	16.67 - 2.37		
		1.1" Sensor	-	36.67 - 5.21	26.67 - 3.79	18.33 - 2.61		
		4/3" Sensor	-	-	33.33 - 4.74	22.94 - 3.26		
		32mm	-	-	-	33.33 - 4.74		
1.0X 0.033 - 0.095 NA 1-81204	90	Mag.	0.44X - 3.09X	0.64X - 4.50X	0.88X - 6.19X	1.28X - 9.00X	10.21 - 3.53	0.46 - 0.055
		2/3" Sensor	25.00 - 3.56	17.19 - 2.44	12.50 - 1.78	8.59 - 1.22		
		1" Sensor	-	25.00 - 3.56	18.18 - 2.59	12.50 - 1.78		
		1.1" Sensor	-	27.50 - 3.91	20.00 - 2.84	13.75 - 1.96		
		4/3" Sensor	-	-	25.00 - 3.56	17.19 - 2.44		
		32mm	-	-	-	25.00 - 3.56		
1.25X 0.041 - 0.119 NA 1-81205	72	Mag.	0.55X - 3.87X	0.80X - 5.63X	1.10X - 7.73X	1.60X - 11.25X	8.17 - 2.83	0.30 - 0.035
		2/3" Sensor	20.00 - 2.84	13.75 - 1.96	10.00 - 1.42	6.88 - 0.98		
		1" Sensor	-	20.00 - 2.84	14.55 - 2.07	10.00 - 1.42		
		1.1" Sensor	-	22.00 - 3.13	16.00 - 2.28	11.00 - 1.56		
		4/3" Sensor	-	-	20.00 - 2.84	13.75 - 1.96		
		32mm	-	-	-	20.00 - 2.84		
1.5X 0.049 - 0.142 NA 1-81206	46.5	Mag.	0.66X - 4.64X	0.96X - 6.75X	1.32X - 9.28X	1.92X - 13.50X	6.81 - 2.35	0.206 - 0.025
		2/3" Sensor	16.67 - 2.37	11.46 - 1.63	8.33 - 1.19	5.73 - 0.81		
		1" Sensor	-	16.67 - 2.37	12.12 - 1.72	8.33 - 1.19		
		1.1" Sensor	-	18.33 - 2.61	13.33 - 1.90	9.17 - 1.30		
		4/3" Sensor	-	-	16.67 - 2.37	11.46 - 1.63		
		32mm	-	-	-	16.67 - 2.37		
2.0X 0.066 - 0.190 NA 1-81207	32.3	Mag.	0.88X - 6.19X	1.28X - 9.00X	1.76X - 12.38X	2.56X - 18.00X	5.11 - 1.77	0.116 - 0.014
		2/3" Sensor	12.50 - 1.78	8.59 - 1.22	6.25 - 0.89	4.30 - 0.61		
		1" Sensor	-	12.50 - 1.78	9.09 - 1.29	6.25 - 0.89		
		1.1" Sensor	-	13.75 - 1.96	10.00 - 1.42	6.88 - 0.98		
		4/3" Sensor	-	-	12.50 - 1.78	8.59 - 1.22		
		32mm	-	-	-	12.50 - 1.78		

The above fields of view are measured diagonally in millimeters (Horizontal = Diagonal x 0.8 and Vertical = Diagonal x 0.6) on a 4:3 aspect ratio sensor.  
 Dark Gray box: Contact your Navitar sales representative for further guidance when selecting this option.

NOTE: Coax and fine focus options all maintain same FOV, resolution, and working distance, subject to adequate lighting

# Resolv4K Field of View Matrix with Objectives (mm)

UltraZoom	Objective Lens	Rear Adapter Mag		0.6875X	1X	1.375X	2X	Resolve Limit (µm)	Depth of Field (µm)
		Ideal Camera Format		2/3"	1"	4/3"	32mm (APS)		
		Pixel Resolution (µm)		2.24 - 5.47	3.26 - 7.95	4.48 - 10.93	6.51 - 15.90		
		W.D. (mm)	Format	Low-High	Low-High	Low-High	Low-High		
Navitar 4X 0.066 - 0.190 NA 1-55075	20	Mag.	0.88X - 6.19X	1.28X - 9.00X	1.76X - 12.38X	2.56X - 18.00X	5.11 - 1.77	116 - 14	
		2/3" Sensor	8.10 - 1.78	8.10 - 1.22	6.25 - 0.89	4.30 - 0.61			
		1" Sensor	-	8.10 - 1.78	8.10 - 1.29	6.25 - 0.89			
		1.1" Sensor	-	8.10 - 1.96	8.10 - 1.42	6.88 - 0.98			
		4/3" Sensor	-	-	8.10 - 1.78	8.10 - 1.22			
32mm	-	-	-	8.10 - 1.78					
Navitar 6X NA 0.099 - 0.285 1-55401	25	Mag.	1.32X - 9.28X	1.92X - 13.50X	2.64X - 18.56X	3.84X - 27.00X	3.40 - 1.18	51 - 6.2	
		2/3" Sensor	6.25 - 1.19	6.25 - 0.81	4.17 - 0.59	2.86 - 0.41			
		1" Sensor	-	6.25 - 1.19	6.25 - 0.86	4.17 - 0.59			
		1.1" Sensor	-	6.25 - 1.30	6.25 - 0.95	4.58 - 0.65			
		4/3" Sensor	-	-	6.25 - 1.19	6.25 - 0.81			
32mm	-	-	-	6.25 - 1.19					
Navitar 10X 0.164 - 0.400 NA 1-55227	10	Mag.	2.20X - 15.47X	3.20X - 22.50X	4.40X - 30.94X	6.40X - 45.00X	2.04 - 0.84	19 - 3.1	
		2/3" Sensor	3.20 - 0.71	3.20 - 0.49	2.50 - 0.36	1.72 - 0.24			
		1" Sensor	-	3.20 - 0.71	3.20 - 0.52	2.50 - 0.36			
		1.1" Sensor	-	3.20 - 0.78	3.20 - 0.57	2.75 - 0.39			
		4/3" Sensor	-	-	3.20 - 0.71	3.20 - 0.49			
32mm	-	-	-	3.20 - 0.71					
Mitotoyo 5X 0.082 - 0.140 NA 1-60226	34	Mag.	1.10X - 7.73X	1.60X - 11.25X	2.20X - 15.47X	3.20X - 22.50X	4.09 - 2.40	74.1 - 25.5	
		2/3" Sensor	4.80 - 1.42	4.80 - 0.98	4.80 - 0.71	3.44 - 0.49			
		1" Sensor	-	4.80 - 1.42	4.80 - 1.03	4.80 - 0.71			
		1.1" Sensor	-	4.80 - 1.56	4.80 - 1.14	4.80 - 0.78			
		4/3" Sensor	-	-	4.80 - 1.42	4.80 - 0.98			
32mm	-	-	-	4.80 - 1.42					
Mitotoyo 10X 0.164 - 0.280 NA 1-60227	33	Mag.	2.20X - 15.47X	3.20X - 22.50X	4.40X - 30.94X	6.40X - 45.00X	2.04 - 1.20	18.5 - 6.4	
		2/3" Sensor	2.40 - 0.71	2.40 - 0.49	2.40 - 0.36	1.72 - 0.24			
		1" Sensor	-	2.40 - 0.71	2.40 - 0.52	2.40 - 0.36			
		1.1" Sensor	-	2.40 - 0.78	2.40 - 0.57	2.40 - 0.39			
		4/3" Sensor	-	-	2.40 - 0.71	2.40 - 0.49			
32mm	-	-	-	2.40 - 0.71					
Mitotoyo 20X 0.329 - 0.420 NA 1-60228	20	Mag.	4.40X - 30.94X	6.40X - 45.00X	8.80X - 61.88X	12.80X - 90.00X	1.02 - 0.80	4.6 - 2.8	
		2/3" Sensor	1.20 - 0.36	1.20 - 0.24	1.20 - 0.18	0.86 - 0.12			
		1" Sensor	-	1.20 - 0.36	1.20 - 0.26	1.20 - 0.18			
		1.1" Sensor	-	1.20 - 0.39	1.20 - 0.28	1.20 - 0.20			
		4/3" Sensor	-	-	1.20 - 0.36	1.20 - 0.24			
32mm	-	-	-	1.20 - 0.36					

Fixed	Navitar Objective Lens	Rear Adapter Mag		0.6875X	1X	1.375X	2X	Resolve Limit (µm)	Depth of Field (µm)
		Pixel Resolution (µm)		1.85	2.68	3.69	5.37		
		W.D. (mm)	Format						
4X 0.200 NA 1-55075	20	Mag.	2.20X	3.20X	4.40X	6.40X	1.77	13.75	
		2/3" Sensor	5.00	3.44	2.50	1.72			
		1" Sensor	-	5.00	3.64	2.50			
		1.1" Sensor	-	5.50	4.00	2.75			
		4/3" Sensor	-	-	5.00	3.44			
APS	-	-	-	5.00					
6X 0.300 NA 1-55401	25	Mag.	3.30X	4.80X	6.60X	9.60X	1.12	6.11	
		2/3" Sensor	3.33	2.29	1.67	1.15			
		1" Sensor	-	3.33	2.42	1.67			
		1.1" Sensor	-	3.67	2.67	1.83			
		4/3" Sensor	-	-	3.33	2.29			
APS	-	-	-	3.33					
10X 0.400 NA 1-55227	10	Mag.	5.50X	8.00X	11.00X	16.00X	0.70	3.44	
		2/3" Sensor	2.00	1.38	1.00	0.69			
		1" Sensor	-	2.00	1.45	1.00			
		1.1" Sensor	-	2.20	1.60	1.10			
		4/3" Sensor	-	-	2.00	1.38			
APS	-	-	-	2.00					

Dark Gray box: Contact your Navitar sales representative for further guidance when selecting this option.

# Resolv4K Fixed Field of View Matrix (in mm at nominal W.D.)

Lens Attachment	Camera Adapter				0.6875X	1X	1.375X	2X
	Pixel Resolution (µm)				1.85	2.68	3.69	5.37
	W.D. (mm)	DOF (mm)	Res. Limit (µm)	Format	Diagonal			
0.25X 0.025 NA 1-81201	359.5	0.88	13.42	Mag.	0.275X	0.40X	0.55X	0.80X
				2/3" Sensor	40.00	27.50	20.00	13.75
				1" Sensor	-	40.00	29.09	20.00
				1.1" Sensor	-	44.00	32.00	22.00
				4/3" Sensor	-	-	40.00	27.50
				APS	-	-	-	40.00
0.5X 0.05 NA 1-81202	173	0.22	6.71	Mag.	0.55X	0.80X	1.10X	1.60X
				2/3" Sensor	20.00	13.75	10.00	6.88
				1" Sensor	-	20.00	14.55	10.00
				1.1" Sensor	-	22.00	16.00	11.00
				4/3" Sensor	-	-	20.00	13.75
				APS	-	-	-	20.00
0.75X 0.075 NA 1-81203	110	0.0978	4.47	Mag.	0.825X	1.20X	1.65X	2.40X
				2/3" Sensor	13.33	9.17	6.67	4.58
				1" Sensor	-	13.33	9.70	6.67
				1.1" Sensor	-	14.67	10.67	7.33
				4/3" Sensor	-	-	13.33	9.17
				APS	-	-	-	13.33
1.0X 0.1 NA 1-81204	90	0.055	3.36	Mag.	1.10X	1.60X	2.20X	3.20X
				2/3" Sensor	10.00	6.88	5.00	3.44
				1" Sensor	-	10.00	7.27	5.00
				1.1" Sensor	-	11.00	8.00	5.50
				4/3" Sensor	-	-	10.00	6.88
				APS	-	-	-	10.00
1.25X 0.125 NA 1-81205	72	0.0352	2.68	Mag.	1.375X	2.00X	2.750X	4.00X
				2/3" Sensor	8.00	5.50	4.00	2.75
				1" Sensor	-	8.00	5.82	4.00
				1.1" Sensor	-	8.80	6.40	4.40
				4/3" Sensor	-	-	8.00	5.50
				APS	-	-	-	8.00
1.5X 0.15 NA 1-81206	46.5	0.0244	2.24	Mag.	1.650X	2.40X	3.30X	4.80X
				2/3" Sensor	6.67	4.58	3.33	2.29
				1" Sensor	-	6.67	4.85	3.33
				1.1" Sensor	-	7.33	5.33	3.67
				4/3" Sensor	-	-	6.67	4.58
				APS	-	-	-	6.67
2X 0.20 NA 1-81207	32.3	0.0138	1.68	Mag.	2.20X	3.20X	4.40X	6.40X
				2/3" Sensor	5.00	3.44	2.50	1.72
				1" Sensor	-	5.00	3.64	2.50
				1.1" Sensor	-	5.50	4.00	2.75
				4/3" Sensor	-	-	5.00	3.44
				APS	-	-	-	5.00

Dark Gray box: Contact your Navitar sales representative for further guidance when selecting this option.

For 4:3 aspect ratio sensor, Horizontal = Diagonal x 0.8, Vertical = Diagonal x 0.6

APS - 32mm image circle