























Image	Model	EFL (mm) Aperture F No.	Mount Thread	Filter	Sensor	Image Circle (mm)	Chief Ray Angle	Field Angle (D x H x V)	Total Track (mm)	Diameter (mm)	TV Distortion	Lens Construction	Note
	1M08750AR-M01	0.878 mm / F 5.0	-	AR	1/11"	Ø 1.81	< 30°	D: 120° H: 95.1° V: 56.2°	2.82	Ø 2.9	3P		
	1M09245IRF-M2.2	0.92 mm / F 4.5	M 2.2 x P 0.25	IR	1/9"	Ø 2.3	< 25°	D: 140° H: 116° V: 60°	7.8	Ø 2.2 x 4.1	5G + 1 IR		
	1M10045IRF-M2.2	1.00 mm / F 4.5	M 2.2 x P 0.25	IR	1/9"	Ø 2.3	< 27.8°	D: 120° H: 98° V: 56.5°	4.75	-	4G + 4E		
	1M10048IR-M3.2	1.00 mm / F 4.8	M 3.2 x P 0.2	IR	1/9"	Ø 2.18	< 31.8°	D: 120° H: 97° V: 54°	3.4	-	3P + 1 IR		
	1M11040IRF-M2.6	1.10 mm / F 4.0	M 2.6 x P 0.25	IR	1/9"	2.36	< 30°	D: 110°	3.3	Ø 2.6 x 2.82	3P + IR		
	1M12120IR-M9	1.21 mm / F 2.0	M 9 x P 0.5	IR	-	4.9	< 17.7°	D: 161° H: 130° V: 100°	11.4	-	1G4P + IR		
	1M13235IR-M2.8	1.32 mm / F 3.5	M 2.8 x P 0.2	IR	1/8.32"	2.36	< 32.8°	D: 75° H: 67.2° V: 41.1°	2.00	Ø 3.5	< 1 %		
	1M13220IR-3.0	1.32 mm / F 2.0	-	IR	1/9"	2.36	< 33.5°	D: 75.6° H: 63.8° V: 41.6°	2.05	Ø 3.8	< 1 %		
	1M13240IR-3.0	1.32 mm / F 4.0	-	IR	1/9"	2.36	< 33.5°	D: 75.6° H: 63.8° V: 41.6°	2.05	Ø 3.8	< 1 %		
	1M13220IR-M3.2	1.32 mm / F 2.0	M 3.2 x P 0.2	IR	1/9"	2.36	< 33.5°	D: 75.6° H: 63.8° V: 41.6°	2.05	Ø 3.5	< 1 %		
	1M13240IR-M3.2	1.32 mm / F 4.0	M 3.2 x P 0.2	IR	1/9"	2.36	< 33.5°	D: 75.6° H: 63.8° V: 41.6°	2.05	Ø 3.5	< 1 %		
















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	1M13220IR-M3.5	1.32 mm / F 2.0	M 3.5 x P 0.2	IR	1/9"	2.36	< 33.5°	D: 75.6° H: 63.8° V: 41.6°	2.05	Ø 3.5	< 1 %	3P + IR	
	1M13240IR-M3.5	1.32 mm / F 4.0	M 3.5 x P 0.2	IR	1/9"	2.36	< 33.5°	D: 75.6° H: 63.8° V: 41.6°	2.05	Ø 3.5	< 1 %	3P + IR	
	1M13320IR-M3.5	1.33 mm / F 2.0	M 3.5 x P 0.2	IR	1/9"	2.36	< 33.8°	D: 75.1° H: 67.7° V: 41.2°	1.95	Ø 3.5	< 1 %	3P + IR	
	1M13340IR-M3.5	1.33 mm / F 4.0	M 3.5 x P 0.2	IR	1/9"	2.36	< 33.8°	D: 75.1° H: 67.7° V: 41.2°	1.95	Ø 3.5	< 1 %	3P + IR	
	1M36045IRV-M7	3.60 mm / F 4.5	M 7 x P 0.35	IR	1/3.6"	5.8	< 11°	D: 72° H: 55.5° V: 41°	7.3	Ø 7 x 8	-	-	
	1M80025IRV-M7	8.0 mm / F 2.5	M7 x P 0.5	IR	1/3"	6.0	-	-	12.34	Ø 7 x 9.5	-	-	
	1M10028ARV-M12	10.0 mm / F 2.8	M 12 x P 0.5	AR	1/3"	6.0	-	D: 35° H: 28° V: 21°	16.3	-	-	4C + 4E	
	1M15025ARV-M12	15 mm / F 2.5	M 12 x P 0.5	AR	1/2"	6.0	8.9°	D: 30°	21.6	-	-	-	

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Image	Model	EFL (mm) Aperture F No.	Mount Thread	Filter	Sensor	Image Circle (mm)	Chief Ray Angle	Field Angle (D x H x V)	Total Track (mm)	Diameter (mm)	TV Distortion	Lens Construction	Note
	2M10645IR-M2.2	1.06 mm / F 4.5	M 2.2 x P 0.25	IR	1/6"	3.1	< 32°	D: 120°	5.5	(D) 3 x (L) 4.4	< 30%	-	
	2M15040AR-M4	1.50 mm / F 4.0	M 4 x P 0.2	AR	1/6"	3.27	< 32.7°	D: 91° H: 80.3° V: 49.2°	4.0	-	< - 5 %	4P	
	2M15040IR-M4	1.50 mm / F 4.0	M 4 x P 0.2	IR	1/6"	3.27	< 32.7°	D: 91° H: 80.3° V: 49.2°	4.0	-	< - 5 %	4P + IR	
	2M15057AR-M4	1.50 mm / F 5.7	M 4 x P 0.2	AR	1/6"	3.27	< 32.7°	D: 91° H: 80.3° V: 49.2°	4.0	-	< - 5 %	4P	
	2M15057IR-M4	1.50 mm / F 5.7	M 4 x P 0.2	IR	1/6"	3.27	< 32.7°	D: 91° H: 80.3° V: 49.2°	4.0	-	< - 5 %	4P + IR	
	2M15057IR-M01	1.50 mm / F 5.7	-	IR	1/6"	3.27	< 32.7°	D: 91° H: 80.3° V: 49.2°	4.0	-	< - 5 %	4P + IR	
	2M15057IR-M4-H01	1.50 mm / F 5.7	M 4 x P 0.2 (With Holder)	IR	1/6"	3.27	< 32.7°	D: 91° H: 80.3° V: 49.2°	4.0	-	< - 5 %	4P + IR	
	2M15080AR-M4	1.50 mm / F 8.0	M 4 x P 0.2	AR	1/6"	3.27	< 32.7°	D: 91° H: 80.3° V: 49.2°	4.0	-	< - 5 %	4P	
	2M15080IR-M4	1.50 mm / F 8.0	M 4 x P 0.2	IR	1/6"	3.27	< 32.7°	D: 91° H: 80.3° V: 49.2°	4.0	-	< - 5 %	4P + IR	
	2M15248IR-M4	1.523 / F 4.8	M 4 x P 0.2	IR	1/6"	Ø 3.4	< 32.7°	D: 158° H: 132° V: 65°	6.0	(D) 6.5 x (L) 5.22	< - 80.7 %	4P + IR	
	2M15260IR-M4	1.523 / F 6.0	M 4 x P 0.2	IR	1/6"	Ø 3.4	< 32.7°	D: 158° H: 132° V: 65°	6.0	(D) 6.5 x (L) 5.22	< - 80.7 %	4P + IR	
















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	2M15280IR-M4	1.523 / F 8.0	M 4 × P 0.2	IR	1/6"	Ø 3.4	< 32.7°	D: 158° H: 132° V: 65°	6.0	(D) 6.5 × (L) 5.22	< - 80.7 %	4P + IR	
	2M15557AR-M4	1.55 / F 5.7	M 4 × P 0.2	IR	1/6"	Ø 3.3	< 33.2°	D: 86.8° H: 78.3° V: 48.4°	3.95	(D) 4.0 × (L) 3.422	< - 5 %	4P	
	2M15557IR-M4	1.55 / F 5.7	M 4 × P 0.2	IR	1/6"	Ø 3.3	< 33.2°	D: 86.8° H: 78.3° V: 48.4°	3.95	(D) 4.0 × (L) 3.422	< - 5 %	4P + IR	
	2M15580AR-M4	1.55 / F 8.0	M 4 × P 0.2	AR	1/6"	Ø 3.3	< 33.2°	D: 86.8° H: 78.3° V: 48.4°	3.95	(D) 4.0 × (L) 3.422	< - 5 %	4P	
	2M15580IR-M4	1.55 / F 8.0	M 4 × P 0.2	IR	1/6"	Ø 3.3	< 33.2°	D: 86.8° H: 78.3° V: 48.4°	3.95	(D) 4.0 × (L) 3.422	< - 5 %	4P + IR	
	2M15510AR-M4	1.55 / F 10	M 4 × P 0.2	AR	1/6"	Ø 3.3	< 33.2°	D: 86.8° H: 78.3° V: 48.4°	3.95	(D) 4.0 × (L) 3.422	< - 5 %	4P	
	2M15510IR-M4	1.55 / F 10	M 4 × P 0.2	IR	1/6"	Ø 3.3	< 33.2°	D: 86.8° H: 78.3° V: 48.4°	3.95	(D) 4.0 × (L) 3.422	< - 5 %	4P + IR	
	2M18320AR-M4	1.83 mm / F 2.0	M 4 × P 0.2	AR	1/6"	Ø 3.24	< 34.5°	D: 77.3° H: 70.0° V: 42.7°	2.3	-	< 1.5%	3P	
	2M18320IR-M4	1.83 mm / F 2.0	M 4 × P 0.2	IR	1/6"	Ø 3.24	< 34.5°	D: 77.3° H: 70.0° V: 42.7°	2.3	-	< 1.5%	3P+IR	
	2M18350AR-M4	1.83 mm / F 5.0	M 4 × P 0.2	AR	1/6"	Ø 3.24	< 34.5°	D: 77.3° H: 70.0° V: 42.7°	2.3	-	< 1.5%	3P	
	2M18350IR-M4	1.83 mm / F 5.0	M 4 × P 0.2	IR	1/6"	Ø 3.24	< 34.5°	D: 77.3° H: 70.0° V: 42.7°	2.3	-	< 1.5%	3P+IR	












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	2M18380AR-M4	1.83 mm / F 8.0	M 4 × P 0.2	AR	1/6"	Ø 3.24	< 34.5°	D: 77.3° H: 70.0° V: 42.7°	2.3	-	< 1.5%	3P	
	2M18640IRF-M4	1.86 mm / F 4.0	M 4 × P 0.2	IR	1/6"	Ø 3.0	< 28°	D: 88° H: 75.1° V: 58.4°	3.2	-	< 1.5%	3P+IR	
	2M18650IRF-M4	1.86 mm / F 5.0	M 4 × P 0.2	IR	1/6"	Ø 3.0	< 28°	D: 88° H: 75.1° V: 58.4°	3.2	-	< 1.5%	3P+IR	
	2M18660IRF-M4	1.86 mm / F 6.0	M 4 × P 0.2	IR	1/6"	Ø 3.0	< 28°	D: 88° H: 75.1° V: 58.4°	3.2	-	< 1.5%	3P+IR	
	2M20055IRF-M4	2.0 mm / F 5.5	M 4 × P 0.2	IR	1/4"	Ø 4.5	< 22°	D: 120° H: 105° V: 60°	8	(D) 4 × (L) 5.5	< 35%	4G+IR	
	2M28820IRF-M3.8	2.88 mm / F 2.0	M 3.8 × P 0.25	IR	1/7"	3.0	< 27.45°	D: 48.09° H: 42.5° V: 24.3°	3.62	(D) 3.8 x (L) 2.94	< 1.0%	3P+IR	
	2M28848IRF-M3.8	2.88 mm / F 4.8	M 3.8 × P 0.25	IR	1/7"	3.0	< 27.45°	D: 48.09° H: 42.5° V: 24.3°	3.62	(D) 3.8 x (L) 2.94	< 1.0%	3P+IR	
	2M31523IR-M12	3.15 mm / F 2.35	M 12 × P 0.5	IR	1/4"	-	-	D: 146° H: 113° V: 84°	16.57	-	< 14.3%	6G + IR	
	2M38028IRF-M7	3.8 mm / F 2.8	M 7 × P 0.35	IR	1/4"	4.8	< 15°	D: 66°	4.8	-	-	3P + IR	
	2M42026IRF-M7	4.2 mm / F 2.6	M 7 × P 0.35	IR	1/4"	Ø 5.6	< 24.65°	60°	5.1	M 7 x 4.28	< 1.2%	4P + IR	
	2M25A25AR-M12	25 mm / F 2.5	M 12 × P 0.5	AR	1/3"	6.0	-	D: 13.5° H: 10.7° V: 7.8°	31.3	(D) 25 × (L) 23.2	-	4C + 4E	



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	2M25A25IR-M12	25 mm / F 2.5	M 12 x P 0.5	IR	1/3"	6.0	-	D: 13.5° H: 10.7° V: 7.8°	31.3	(D) 25 x (L) 23.2	-	4C + 4E + IR	
	2M45016AR-M12	45 mm / F 1.6	M 12 x P 0.5	AR	1/3"	6.0	-	D: 6.8°	-	12 (D) x (L) 47.5	-	-	












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	3M18022IR-M12	1.8 mm / F 2.2	M 12 × P 0.5	IR	1/2.7" 1/3"	Ø 7.0	24.5°	D: 128° H: 110° V: 95°	15.5	-	-	-	
	3M25024IRV-M12	2.5 mm / F 2.4	M 12 × P 0.5	IR	-	Ø 6.0	-	D: 140° H: 88° V: 63°	10.8	-	-	5G + IR	
	3M31828IR-M12	3.18 mm / F 2.8	M 12 × P 0.35	IR	1/2.7" 1/3"	Ø 7.8	< 11.2°	(1/2.7") (1/3") D: 86° D: 128° H: 74° H: 110° V: 60° V: 95°	15.6	-	< 0.95 %	2G + 2P + IR	
	3M36520IR-M7	3.65 mm / F2.0	M 7 × P 0.35	IR	1/2.7"	Ø 6.0	-	D: 120° H: 96.5° V: 52.2°	15.95	-	-	6G + IR	
	3M37025IRV-M10	3.7 mm / F 2.5	M 10 × P 0.5	IR	1/2.7" 1/3"	Ø 6.0	-	D: 100° D: 80°	9	-	-	-	
	3M37025IRV-M12	3.7 mm / F 2.5	M 12 × P 0.5	IR	1/2.7" 1/3"	Ø 6.0	-	D: 100° D: 80°	9	-	-	-	
	3M37025ARV-M12	3.7 mm / F 2.5	M 12 × P 0.5	AR	1/2.7" 1/3"	Ø 6.0	-	D: 100° D: 80°	9	-	-	-	
	3M37025WIRV-M12	3.7 mm / F 2.5	M 12 × P 0.5	IR	1/2.7" 1/3"	Ø 6.0	-	D: 100° D: 80°	9	-	-	-	
	1M38020IRC-M10	3.8 mm / F 2.0	M 10 × P 0.5	IR	1/3"	Ø 6.0	-	D: 92°	10.46	Ø 9.1 × 7.4	-	4 Components 4 Elements	
	1M38020ARC-M10	3.8 mm / F 2.0	M 10 × P 0.5	AR	1/3"	Ø 6.0	-	D: 92°	10.46	Ø 9.1 × 7.4	-	4 Components 4 Elements	
	3M4324IR-M12	4.3 mm / F 2.4	M 12 × P 0.5	IR	1/2.7" 1/3"	-	-	D: 95° D: 80°	10.2	-	-	-	




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	3M151471R-M9	15.1 mm / F 4.7	M 9 x P 0.5	IR	-	Ø 8.3	-	(1/3") D: 125° H: 96° V: 72° D: 128° H: 110° V: 95°	16	-	-	4G2P + IR	





















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	5M13022IRF-M5.5	1.3 mm / F 2.2	M 5.5 x P 0.25	IR	1/5"	Ø 4.0	< 33.5°	D: 115° H: 95.1° V: 77.1°	4.01	-	< 9.0%	4P COB	
	5M13048IRF-M5.5	1.30 mm / F 4.8	M 5.5 x P 0.25	IR	1/5"	Ø 4.0	< 33.5°	D: 115° H: 95.1° V: 77.1°	4.01	-	< 9.0%	4P COB	
	5M23422IRF-M4	2.34 mm / F 2.2	M 4 x P 0.25	AR	1/4"	Ø 3.8	< 33°	D: 16.2° H: 13° V: 9.7°	3.34	Ø 5	2.40 %	3P + IR	
	5M23447IRF-M4	2.34 mm / F 4.7	M 4 x P 0.25	IR	1/5"	Ø 3.8	< 33°	D: 74.3° H: 63.3° V: 49.9°	3.34	-	2.40 %	3P + IR	
	6M26720IR-M12	2.67 mm / F 2.0	M 12 x P 0.5	IR	1/5"	-	-	D: 104° H: 81° V: 60°	16.76	-	< 8.4 %	6G + IR	
	5M3020IR-M10	3.0 mm / F 2.0	M 10 x P 0.5	IR	1/3.2"	Ø 7.15	< 12°	D: 90°	4.7	-		6G + IR	
	5M3020IR-M10-01	3.0 mm / F 2.0	M 10 x P 0.5	IR	1/2.5"	Ø 4.8	< 12°	D: 90°	4.7	-		6G + IR	
	5M3020AR-M12	3.0 mm / F 2.0	M 12 x P 0.5	AR	1/4"	Ø 7.15	-	D: 90°	-	-		-	
	5M31228IRF-M6	3.128 mm / F 2.8	M 6.0 x 0.35	IR	1/4"	Ø 6.0	< 31.2°	D: 70.9° H: 60° V: 46.6°	3.6	M 6 x 3.0	< 1.60 %	3P + IR	
	5M31250IRF-M6	3.128 mm / F 5.0	M 6.0 x 0.35	IR	1/4"	Ø 6.0	< 31.2°	D: 70.9° H: 60° V: 46.6°	3.6	M 6 x 3.0	< 1.60 %	3P + IR	
	5M34028IRF-7-M6	3.4 mm / F 2.8	M 6.0 x 0.35	IR	-	Ø 4.8	28°	D: 65.1° H: 54.5° V: 42.3°	4.2	-	-	4P + IR	































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	5M34028IRF-M6	3.4 mm / F 2.8	M 6.0 x 0.35	IR	-	Ø 4.8	28°	D: 65.1° H: 54.5° V: 42.3°	4.2	-	-	4P + IR	
	5M34060IRF-M6	3.4 mm / F 6.0	M 6.0 x 0.35	IR	-	Ø 4.8	28°	D: 65.1° H: 54.5° V: 42.3°	4.2	-	-	4P + IR	
	5M34014IRF-M6	3.4 mm / F 14	M 6 x P 0.35	IR	-	Ø 4.8	28°	D: 65.1° H: 54.5° V: 42.3°	4.2 mm	-	-	4P + IR	
	5M36520IR-M9	3.65 mm / F 2.0	M 9 x P 0.5	IR	1/2.7"	Ø 8.2	< 11.7°	D: 120° H: 96.5° V: 52.2°	15.91	-	-	6G + IR	
	5M40024IRF-M6	4.0 mm / F 2.4	M 6 x P 0.35	IR	1/4"	Ø 5.2	-	D: 62° H: 52° V: 33°	4.66	M6 x 3.65	<- 1.0 %	4E + IR	
	5M42622IRF-M6	4.26 mm / F 2.2	M 6 x P 0.3	IR	1/3.2"	Ø 5.85	< 22.8°	67°	4.96	M6 x 3.5	< 1.2 %	4P + IR	
	5M52028IRF-M7.5	5.2 mm / F 2.8	M 7.5 x P 0.35	IR	1/2.5"	Ø 6	-	D: 60°	-	-	<- 1.0 %	-	
	5M1675AR-M12	16.0 mm / F 7.5	M 12 x P 0.5	AR	1/4"	-	-	D: 16.2° H: 13° V: 9.7°	-	-	-	-	

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	14M23328IR-M12	2.33 mm / F 2.8	M 12 x P 0.5	IR	1/2.7"	Ø 6.77	< 17°	D: 180° H: 149.6° V: 80.9°	29.3	-	<- 66.5 %	7G+ IR	
	6M26720IR-M12	2.67 mm / F 2.0	M 12 x P 0.5	IR	-	-	-	D: 104° H: 81° V: 60°	16.76	-	-	-	
	12M29022AR-M12	2.9 mm / F 2.2	M 12 x P 0.5	AR	1/3.2"	Ø 6.3	30°	D: 126° H: 95° V: 72°	58.3	(D) 17.5 x (L)19.68	-55%	6G	
	12M29022IR-M12	2.9 mm / F 2.2	M 12 x P 0.5	IR	1/3.2"	Ø 6.3	30°	D: 126° H: 95° V: 72°	22.14	(D) 17.5 x (L)19.68	-55%	6G + IR	
	8M30022IR-M6	3.0 mm / F 2.2	M 6 x P 0.25	IR	1/4"	Ø 4.95	< 34.4°	D: 76°	3.75	-	-	-	
	14M32018IR-M12	3.2 mm / F 1.8	M 12 x P 0.5	IR	1/3"	Ø 8.2	< 13.75°	D: 115° H: 98° V: 55°	23	-	-	-	
	13M42024IRF-M6.5	4.2 mm / F 2.4	M 6.5 x P 0.25	IR	1/3.2"	Ø 6.0	25°	D: 70°	5.0	(D) 6.5 x (L) 4.0	-	-	
	13M44048IRF-M6.5	4.4 mm / F 4.8	M 6.5 x P 0.25	IR	1/3.2"	Ø 6.0	25°	D: 68°	5.4	(D) 6.5 x (L) 4.3	< -0.5%	5P + IR	
	8M1432IRB	14 ~ 32 mm / F 4	-	IR	1/3"	-	-	D: 25° H: 19.6° V: 14.6°	58.3	(D) 4.9 x (L) 58	-	4G2P + IR	