

5 MP Fixed-focal Lens

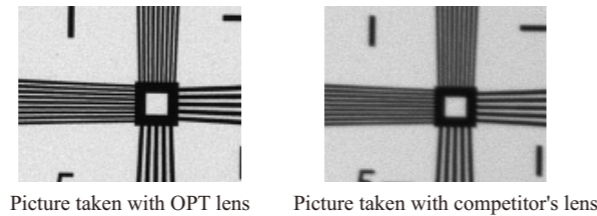


Product Features

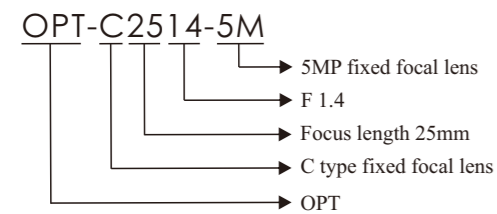
- 1 Professional grade design and stable quality**
Professional grade optical performance
- 2 High resolution**
High-resolution optical design, compatible with many common industrial 5 MP cameras, suitable for 3.45 μm pixel pitch and below and 5 MP image sensors of 2/3" optical format. Resolution of 140 lp/mm over the whole Field of View (FOV) guarantees crisp images
- 3 Low distortion**
Total distortion < 0.9%,
Minimum as low as 0.02% * 1

- 4 High uniformity**
Obtain clear uniform images thanks to our anti-shading technologies and by using wide-angle lenses

- 5 Broad spectrum**
Suitable for wavelengths from 400 to 1000 nm supporting the visual spectrum and NIR band
* 1 OPT-C0420-5M and OPT-C0620-5M except 2 models

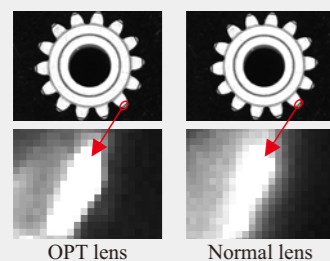


Selection Guide



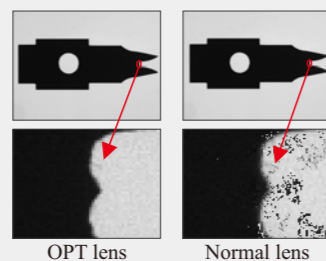
Applications

Image Comparison in Gear Chamfering



OPT lens Normal lens

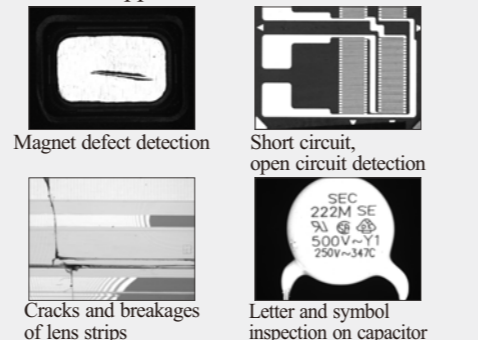
Image Comparison in Gap Detection



OPT lens Normal lens

Result: The OPT lens provides a clearer image with sharp edges and detailed resolution compared to a normal lens under the same conditions.

These series of lenses can be used in many areas of applications



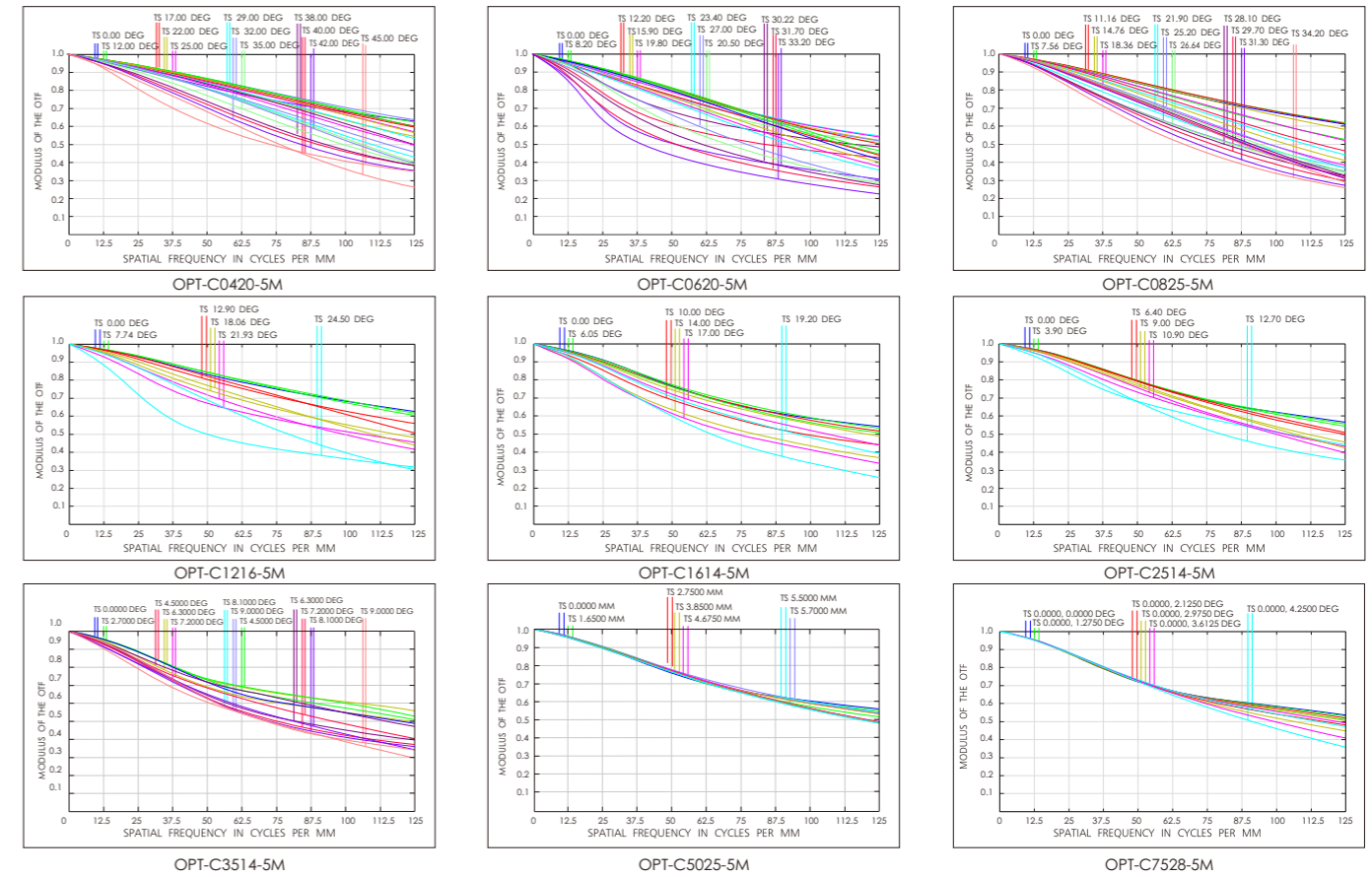
Magnet defect detection

Short circuit, open circuit detection

Cracks and breakages of lens strips

Letter and symbol inspection on capacitor

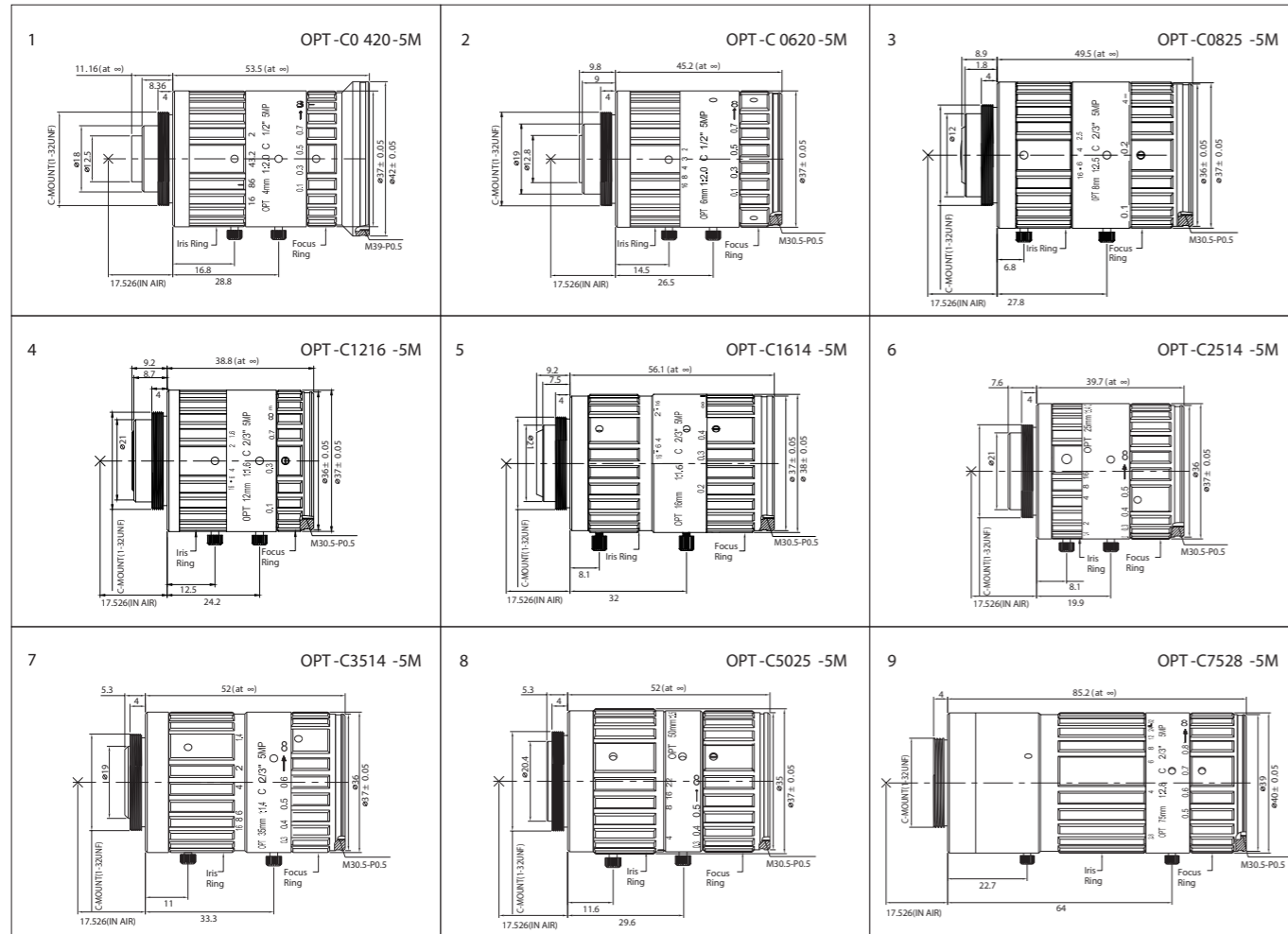
MTF Drawing



Model Table

No.	Model	Focal length [mm]	Aperture range	WD [mm]	Filter Thread [mm]	Distortion	Weight [g]	Matching chip	FOV angle [A°*H°*V°]		
1	OPT-C0420-5M	4	2.0~16	80~∞	M39*P0.5	<1.7%	126	1/3"	72.4°	60.6°	47.2°
								1/2"	88.2°	76°	60.6°
2	OPT-C0620-5M	6	2.0~16	80~∞	M30.5*P0.5	<1.05%	112	1/3"	53.6°	44°	33.5°
								1/2"	67°	56.6°	44°
3	OPT-C0825-5M	8	2.5~16	100~∞	M30.5*P0.5	<0.7%	131	1/3"	41.8°	33.8°	25.8°
								1/2"	54°	44.2°	33.8°
								1/1.8"	59.6°	49.2°	37.9°
								2/3"	69°	58°	45°
4	OPT-C1216-5M	12	1.6~16	150~∞	M30.5*P0.5	<0.55%	94	1/3"	27.9°	22.4°	16.9°
								1/2"	37°	29.6°	22.4°
								1/1.8"	41°	33.2°	25.2°
								2/3"	49.1°	40.2°	30.6°
5	OPT-C1614-5M	16	1.4~16	200~∞	M30.5*P0.5	<0.56%	141	1/3"	21.1°	17°	12.7°
								1/2"	28.2°	22.4°	16.9°
								1/1.8"	31.4°	25.2°	19°
								2/3"	38.2°	30.8°	23.2°
6	OPT-C2514-5M	25	1.4~16	200~∞	M30.5*P0.5	<0.3%	83.5	1/3"	13.7°	11°	8.3°
								1/2"	18.2°	14.6°	11°
								1/1.8"	20.4°	16.5°	12.4°
								2/3"	24.8°	20°	15°
7	OPT-C3514-5M	35	1.4~16	390~∞	M30.5*P0.5	<0.1%	127	1/3"	10°	8°	6°
								1/2"	13.2°	10.6°	8°
								1/1.8"	14.8°	11.9°	9°
								2/3"	18°	14.4°	10.8°
8	OPT-C5025-5M	50	2.5~22	570~∞	M30.5*P0.5	<0.1%	111	1/3"	6.9°	5.5°	4.1°
								1/2"	9.2°	7.3°	5.5°
								1/1.8"	10.3°	8.2°	6.2°
								2/3"	12.5°	10°	7.6°
9	OPT-C7528-5M	75	2.8~32	600~∞	M30.5*P0.5	<0.1%	222	1/3"	4.56°	3.65°	2.72°
								1/2"	6.1°	4.84°	3.62°
								1/2.5"	5.4°	4.35°	3.24°
								2/3"	8.34°	6.66°	5.0°

Dimensional Drawings [mm]



Selection reference (with extension tube)

Extension tube	Model	OPT-C0420-5M		OPT-C0620-5M		OPT-C0825-5M		OPT-C1216-5M		OPT-C1614-5M	
		WD	0.08m~∞	0.08m~∞	0.08m~∞	0.1m~∞	0.15m~∞	0.15m~∞	0.2mm~∞		
0mm	WD(mm)	100	100	134	150	200					
	1/3"	131x99	85x64	82x61.5	65x49	66x49					
	1/2.5"	157x116	101x76	98x73.5	78.5x59	80x60					
	1/1.8"	201x153	137x103	125x93.8	97.5x73	100x74					
	2/3"	237x199	154x130	149x111.8	117x98	120x100					
	Mag.	0.04116x	0.0595x	0.0587	0.08x	0.079x					
0.5mm	WD(mm)	15	35	43	63	60	90	100	136	130	180
	1/3"	35x27	59.5x45	45.5x34.5	63x47.5	44x33.5	64x49	46x34.5	60x45	47x35.5	61x46
	1/2.5"	43x32	70.5x52.5	53x39	75x56	52.5x39	75.5x56.5	54x41	72x54	55x41	73x54.5
	1/1.8"	48x36	85x64	64x48	90x68	62x47	90x67	68x51	90x67	70x53	102x77
	2/3"	64x48	132.5x99.4	80x60	108.5x81	81x61	116x87	82x71	107x91	83x69	109x82
	Mag.	0.27x	0.18x	0.138x	0.094x	0.131x	0.087x	0.12x	0.088x	0.1215x	0.0877x
1mm	WD(mm)	-	-	19	25	34	52	65	85	95	140
	1/3"	-	-	29x23	35x26	30.5x22.5	42.6x32	32.5x24.5	40x30	35x26	49x37
	1/2.5"	-	-	31x23.5	40x30	35x26	50.5x38	38x28	47.5x36	42.5x32	59x44
	1/1.8"	-	-	41x30.8	50x37.5	45x34	65x49	49.5x37.5	61.5x47	55.5x42	75.5x57
	2/3"	-	-	50x37.5	60x45	51x42.4	76x63.5	57x47.5	71x59	64.5x54	90x74
	Mag.	-	-	0.313x	0.238x	0.2311x	0.1511x	0.184x	0.141x	0.1663x	0.1128x
1.5mm	WD(mm)	-	-	-	-	22	31	49	59	80	100
	1/3"	-	-	-	-	23.5x17.6	29x21.8	26x20	30x22	31.5x23.5	37.5x28
	1/2.5"	-	-	-	-	27.5x20.5	34x25.5	30.5x23	35.5x26.5	38x28	45x34
	1/1.8"	-	-	-	-	35.5x27	45x33.8	38x28	46x35	49x37	58x44
	2/3"	-	-	-	-	39x29.3	51x38.3	46x39.5	54x45	58x48	69x57
	Mag.	-	-	-	-	0.3572x	0.2535x	0.244x	0.203x	0.1975x	0.158x
2mm	WD(mm)	-	-	-	-	-	-	-	-	60	90
	1/3"	-	-	-	-	-	-	-	-	26x19	35x26
	1/2.5"	-	-	-	-	-	-	-	-	31x23	42x31.5
	1/1.8"	-	-	-	-	-	-	-	-	40x30	53x40
	2/3"	-	-	-	-	-	-	-	-	46x38	63x52.5
	Mag.	-	-	-	-	-	-	-	-	0.2633x	0.1755x
5mm	W.D(mm)	-	-	-	-	-	-	-	-	18	20
	1/3"	-	-	-	-	-	-	-	-	13.5x10	14.5x10.5
	1/2.5"	-	-	-	-	-	-	-	-	16x12	16.5x12.5
	1/1.8"	-	-	-	-	-	-	-	-	21x16	21.5x16.5
	2/3"	-	-	-	-	-	-	-	-	25x21	26x22
	Mag.	-	-	-	-	-	-	-	-	0.8777x	0.79x

Extension tube	Model	OPT-C2514-5M		OPT-C3514-5M		OPT-C5025-5M		OPT-C7528-5M	
		WD	0.2m~∞	0.39m~∞	0.39m~∞	0.57m~∞	0.57m~∞	0.6m~∞	0.6m~∞
0mm	WD(mm)	200	450	600	600				
	1/3"	38x28.5	61.2x45.9	60x46	36x26				
	1/2.5"	46x34.5	73x54.8	66x49.5	43x33				
	1/1.8"	58x43.5	92x69	82x61	55x41				
	2/3"	68x57	108.5x81.4	97.5x81.5	64.5x54				
	Mag.	0.12625x	0.0769x	0.08x	0.1262x				
0.5mm	WD(mm)	160	190	345	683	550	590	505	598
	1/3"	31x23	37x27.5	47x35	95x71	50x38	54x40	30.8x23	36.3x27.2
	1/2.5"	36.5x27.5	44x33	56x42	113x84.8	60x45	64.5x49	40x29.5	43x32.5
	1/1.8"	47x35	55x41	71x53	141.5x106.1	76x57	81.5x61.5	45x33.75	54.5x41
	2/3"	55x46	66x55	84x63	167x125.3	89x74	106x81	58.5x49	64x53.5
	Mag.	0.1578x	0.132x	0.1034x	0.0507x	0.0917x	0.0855x	0.1500x	0.1266x
1mm	WD(mm)	155	185	299	684	525	585	489	596
	1/3"	30.5x23	36x27	41x30.8	95.5x71.6	48x36	53.9x40	29.5x22	36x27
	1/2.5"	36.5x27	43.5x32.5	48x36	114x85.5	57x43	64x48	35x26.3	43x32.5
	1/1.8"	45x33.5	55x42	61.8x46.4	143x107.3	72x54	80x60	44x33	54x41
	2/3"	53.5x45	65x54	73x54.8	165x123.8	85x71.5	96x80	52x39	64x54
	Mag.	0.1629x	0.1365x	0.1156x	0.0505x	0.096114x	0.08625x	0.1549x	0.127x

Distributed by:
MaxxVision[®]
 Sigmaringer Str. 121
 70567 Stuttgart
 Tel.: +49 711 997 996 3
 Fax: +49 711 997 996 50
 www.maxxvision.com
 info@maxxvision.com

Extension tube	Model	OPT-C2514-5M		OPT-C3514-5M		OPT-C5025-5M		OPT-C7528-5M	
	WD	0.2m~∞		0.39m~∞		0.57m~∞		0.6m~∞	
1.5mm	WD(mm)	140	150	267	682	500	580	470	594
	1/3"	28x21	30x22.5	36.8x27.6	95x71.3	46x35	54x41	28x21	36x27
	1/2.5"	33x25	35.5x26.5	44x33	114x85.5	54.5x41	63.5x48	33x24.8	43x32.5
	1/1.8"	42x31.5	44.5x33	56x42	144x108	68.5x51.5	80x60	42x31.5	54x41
	2/3"	49x41	54x45	66x49.5	170x127.5	81x68	96x80	50x37.5	64x53
	Mag.	0.1803x	0.1683x	0.1297x	0.0517x	0.1009x	0.087x	0.1612x	0.127515x
2mm	WD(mm)	130	135	231	603	420	490	458	592
	1/3"	26x19.5	27x20	37.5x28.1	86x64.5	37.5x28	44x33	27.3x20.5	36x27
	1/2.5"	31x23	32.5x24	38x28.5	102x76.5	45x32	53.5x40	32.5x24.4	43x32
	1/1.8"	39.5x30	41x31	48x36	128x96	57x43	67x50.5	41x30.75	54x41
	2/3"	46x39	48.5x41	57x42.8	151.5x113.6	67x56	79x66	48x36	64x53
	Mag.	0.1942x	0.187x	0.1498x	0.0574x	0.1201x	0.103x	0.1653x	0.1279x
5mm	WD(mm)	85	90	148	223	300	350	410	590
	1/3"	18.5x13.5	19.5x14.5	21.8x16.4	33x24.8	26.5x19.5	31x23.5	24x18	36x27
	1/2.5"	22.5x17	23x17.5	25.5x19.2	39.5x29.6	32x24	37.5x28	29x21.5	43x32.5
	1/1.8"	27x20	30x22.5	32x24	49.8x37.4	40x30	47x35.5	36x27	54x41
	2/3"	32.5x27	35x29	38x28.5	59x44.3	47.5x39.5	56x46.5	43x36	64x53
	Mag.	0.297x	0.2805x	0.2339x	0.1552x	0.1682x	0.1442x	0.1847x	0.1283x
10mm	WD(mm)	42	46	88	98	200	220	320	500
	1/3"	10x7.5	11.8x8.9	14x10.5	16x12	17x12.5	19x14.5	18.5x14	30.5x22.5
	1/2.5"	12x9	14x10.5	17x12.8	19x14.3	21x16	23x17	22.5x17	36x27
	1/1.8"	16x12	17x12.8	20x15	23.5x17.6	26x19.5	29x21.5	29x22	47x35
	2/3"	19x14.3	21x15.8	26x19.5	28x21	30x25	34x28.5	33x27	54x45
	Mag.	0.6012x	0.5488x	0.3933x	0.3533x	0.2523x	0.2293x	0.2367x	0.1514x
15mm	WD(mm)	-	-	-	-	150	160	260	310
	1/3"	-	-	-	-	12.5x9.5	13.5x10	15x11.5	18.5x14
	1/2.5"	-	-	-	-	15x11	16x12	18x15	22x17.5
	1/1.8"	-	-	-	-	18.5x14	20.5x15.5	21x17	27.5x20.5
	2/3"	-	-	-	-	22x18	23.5x19.5	26.5x22	32.5x27
	Mag.	-	-	-	-	0.3364x	0.3153x	0.2913x	0.2443x
20mm	WD(mm)	-	-	-	-	135	143	220	300
	1/3"	-	-	-	-	11.4x8.6	12x9	12.5x9.3	18x13.5
	1/2.5"	-	-	-	-	13.3x10	14.5x10.8	14.5x11	21.5x16
	1/1.8"	-	-	-	-	17x12.8	18.2x13.7	18.5x14	27x20.5
	2/3"	-	-	-	-	19.5x16	21x15.8	22x18	32x26.5
	Mag.	-	-	-	-	0.3737x	0.3529x	0.3443x	0.2525x
25mm	WD(mm)	-	-	-	-	104	116	183	242
	1/3"	-	-	-	-	8x6	9.8x7.4	9.9x7.4	14.5x10.9
	1/2.5"	-	-	-	-	9x6.8	11x8.3	12x9	17x12.8
	1/1.8"	-	-	-	-	12x9	14x10.5	15x11.25	21.5x16.1
	2/3"	-	-	-	-	14x10.5	17x12.8	17x12.8	25x18.8
	Mag.	-	-	-	-	0.4851x	0.435x	1.0348x	0.7435x
30mm	WD(mm)	-	-	-	-	94	98	165	205
	1/3"	-	-	-	-	7.2x5.4	8x6	8.7x6.6	12x9
	1/2.5"	-	-	-	-	8.5x6.4	9x6.8	10.5x8.2	14x10.5
	1/1.8"	-	-	-	-	10.5x7.88	11.8x8.9	13x9.5	18x13.5
	2/3"	-	-	-	-	12.8x9.6	13.8x10.4	15.5x13	21x15.6
	Mag.	-	-	-	-	0.5367x	0.5149x	0.459x	0.3695x
35mm	WD(mm)	-	-	-	-	84	88	150	177
	1/3"	-	-	-	-	6.2x4.7	6.9x3.5	7.5x5.7	10x7.5
	1/2.5"	-	-	-	-	7x5.3	8x6	9.2x7	12x9
	1/1.8"	-	-	-	-	9.0x6.8	10x7.5	11.5x8.5	15x11.25
	2/3"	-	-	-	-	11x8.3	12x9	13.8x11.5	18x13.5
	Mag.	-	-	-	-	0.6007x	0.5734x	0.5049x	0.4279x
40mm	WD(mm)	-	-	-	-	-	-	138	158
	1/3"	-	-	-	-	-	-	7.0x5.3	9x6.8
	1/2.5"	-	-	-	-	-	-	9x6.8	11x8.3
	1/1.8"	-	-	-	-	-	-	10.5x7.88	13.5x10
	2/3"	-	-	-	-	-	-	12.5x9.4	16x12
	Mag.	-	-	-	-	-	-	0.5488x	0.4794x
45mm	WD(mm)	-	-	-	-	-	-	129	140
	1/3"	-	-	-	-	-	-	6.8x5.1	7.6x5.7
	1/2.5"	-	-	-	-	-	-	7.8x5.9	9.2x5.7
	1/1.8"	-	-	-	-	-	-	10.8x8.1	12x9
	2/3"	-	-	-	-	-	-	11x8.3	13.5x11
	Mag.	-	-	-	-	-	-	0.5871x	0.541x