

OPTEM® RetroZoom65 Optical Specifications

with Coaxial Illumination*

Zoom Auxiliary		0.375X TUBE				0.5X TUBE				0.67X TUBE				1.0X TUBE				2.0X TUBE														
		LOW		HIGH		LOW		HIGH		LOW		HIGH		LOW		HIGH		LOW		HIGH												
0.5X 29-20-38-000	NA	0.0129		0.0349		0.0129		0.0349		0.013		0.035		0.0129		0.0349		0.013		0.035												
	MAG	0.13		0.85		0.17		1.13		0.23		1.50		0.35		2.24		0.69		4.31												
	D.O.F.	3.31		0.45		3.31		0.45		3.31		0.45		3.31		0.45		3.31		0.45												
	WD: 169mm	F. 1/4"	5.75	x	7.67	2.83	x	3.77	5.75	x	7.67	2.13	x	2.84	5.75	x	7.67	1.60	x	2.13	5.75	x	7.67	1.07	x	1.43	5.75	x	7.67	0.56	x	0.74
		O. 1/3"	5.75	x	7.67	4.25	x	5.66	5.75	x	7.67	3.20	x	4.27	5.75	x	7.67	2.39	x	3.19	5.75	x	7.67	1.61	x	2.14	5.75	x	7.67	0.84	x	1.11
		V. 1/2"	5.75	x	7.67	5.66	x	7.55	5.75	x	7.67	4.27	x	5.69	5.75	x	7.67	3.19	x	4.25	5.75	x	7.67	2.14	x	2.86	5.75	x	7.67	1.11	x	1.48
		mm 2/3"	5.75	x	7.67	7.78	x	10.38	5.75	x	7.67	5.87	x	7.82	5.75	x	7.67	4.39	x	5.85	5.75	x	7.67	2.95	x	3.93	5.75	x	7.67	1.53	x	2.04
	0.75X 29-20-39-000	NA	0.019		0.052		0.019		0.052		0.019		0.052		0.0193		0.0523		0.019		0.052											
		MAG	0.20		1.27		0.26		1.68		0.35		2.25		0.52		3.34		1.03		6.42											
		D.O.F.	1.49		0.20		1.49		0.20		1.49		0.20		1.49		0.20		1.49		0.20											
WD: 110mm		F. 1/4"	6.0	x	8.00	1.89	x	2.53	6.0	x	8.00	1.4	x	1.90	6.0	x	8.00	1.1	x	1.42	4.6	x	6.14	0.72	x	0.96	2.3	x	3.11	0.37	x	0.50
		O. 1/3"	6.0	x	8.00	2.84	x	3.79	6.0	x	8.00	2.1	x	2.86	6.0	x	8.00	1.6	x	2.13	6.0	x	8.00	1.08	x	1.44	3.5	x	4.66	0.56	x	0.75
		V. 1/2"	6	x	8.00	3.79	x	5.05	6.0	x	8.00	2.9	x	3.81	6.0	x	8.00	2.1	x	2.85	6.0	x	8.00	1.44	x	1.91	4.7	x	6.21	0.75	x	1.00
		mm 2/3"	6	x	8.00	5.21	x	6.94	6.0	x	8.00	3.9	x	5.24	6.0	x	8.00	2.9	x	3.91	6.0	x	8.00	1.97	x	2.63	6.4	x	8.54	1.03	x	1.37
1.0X no lens		NA	0.026		0.070		0.026		0.070		0.026		0.070		0.026		0.070		0.026		0.070											
		MAG	0.27		1.72		0.35		2.28		0.47		3.05		0.70		4.50		1.40		8.76											
		D.O.F.	0.81		0.11		0.81		0.11		0.81		0.11		0.81		0.11		0.81		0.11											
	WD: 89mm	F. 1/4"	1.9	x	2.5	1.4	x	1.9	6.8	x	9.0	1.1	x	1.4	5.1	x	6.7	0.8	x	1.0	3.4	x	4.6	0.5	x	0.7	1.7	x	2.3	0.3	x	0.4
		O. 1/3"	1.9	x	2.5	2.1	x	2.8	6.8	x	9.0	1.6	x	2.1	7.6	x	10.1	1.2	x	1.6	5.1	x	6.9	0.8	x	1.1	2.6	x	3.4	0.4	x	0.5
		V. 1/2"	1.9	x	2.5	2.8	x	3.7	6.8	x	9.0	2.1	x	2.8	7.6	x	10.1	1.6	x	2.1	6.9	x	9.1	1.1	x	1.4	3.4	x	4.6	0.5	x	0.7
		mm 2/3"	1.9	x	2.5	3.8	x	5.1	6.8	x	9.0	2.9	x	3.9	7.6	x	10.1	2.2	x	2.9	6.9	x	9.1	1.5	x	2.0	4.7	x	6.3	0.8	x	1.0
	1.5X 29-20-13-000	NA	0.040		0.11		0.040		0.11		0.040		0.11		0.0399		0.1084		0.040		0.11											
		MAG	0.40		2.62		0.54		3.47		0.72		4.64		1.08		6.89		2.13		12.88											
		D.O.F.	0.35		0.05		0.35		0.05		0.35		0.05		0.35		0.05		0.35		0.05											
WD: 50mm		F. 1/4"	6.0	x	8.00	0.92	x	1.22	4.4	x	5.93	0.69	x	0.92	3.3	x	4.43	0.52	x	0.69	2.2	x	2.97	0.35	x	0.46	1.1	x	1.50	0.19	x	0.25
		O. 1/3"	7.5	x	10.00	1.38	x	1.83	6.7	x	8.89	1.04	x	1.38	5.0	x	6.65	0.78	x	1.03	3.3	x	4.46	0.52	x	0.70	1.7	x	2.25	0.28	x	0.37
		V. 1/2"	7.5	x	10.00	1.83	x	2.44	7.4	x	9.87	1.38	x	1.84	6.6	x	8.87	1.03	x	1.38	4.5	x	5.95	0.70	x	0.93	2.3	x	3.00	0.37	x	0.50
		mm 2/3"	7.5	x	10.00	2.52	x	3.36	7.40	x	9.87	1.90	x	2.53	7.2	x	9.60	1.42	x	1.90	6.1	x	8.18	0.96	x	1.28	3.1	x	4.13	0.51	x	0.68
2.0X 29-20-14-000		NA	0.055		0.15		0.06		0.15		0.06		0.15		0.06		0.15		0.06		0.15											
		MAG	0.57		3.64		0.75		4.84		1.00		6.40		1.50		9.80		2.98		22.00											
		D.O.F.	0.18		0.02		0.18		0.02		0.18		0.02		0.18		0.02		0.18		0.02											
	WD: 35mm	F. 1/4"	4.2	x	5.66	0.66	x	0.88	3.2	x	4.27	0.50	x	0.66	2.4	x	3.20	0.38	x	0.50	1.6	x	2.13	0.24	x	0.33	0.8	x	1.07	0.11	x	0.15
		O. 1/3"	6.4	x	8.48	0.99	x	1.32	4.8	x	6.40	0.74	x	0.99	3.6	x	4.80	0.56	x	0.75	2.4	x	3.20	0.37	x	0.49	1.2	x	1.61	0.16	x	0.22
		V. 1/2"	7.4	x	9.87	1.32	x	1.76	6.4	x	8.53	0.99	x	1.32	4.8	x	6.40	0.75	x	1.00	3.2	x	4.27	0.49	x	0.65	1.6	x	2.15	0.22	x	0.29
		mm 2/3"	7.4	x	9.87	1.81	x	2.42	7.33	x	9.77	1.36	x	1.82	6.6	x	8.80	1.03	x	1.37	4.4	x	5.87	0.67	x	0.90	2.2	x	2.95	0.30	x	0.40

*NOTE: Fields of View indicated in RED represent conditions where the horizontal dimension of the CCD has 50% vignetting. NOT RECOMMENDED.