

for fixed-lens, compact rangefinders

The circle of confusion measurement used is a fairly standard 0.030mm. All distances are in metres.

Table	Focal length	Aperture range	Typical cameras
1	40mm	f/1.7 - f/16	Canonet new QL17 and QL17 G-III; Olympus 35 RD
2	45mm	f/2 - f/16	Canonet QL19
3	40mm	f/2.8 - f/16	Canonet 28
4	42mm	f/2.8 - f/22	Olympus 35 RC
5	42mm	f/1.7 - f/16	Olympus 35 SP

<http://www.squit.co.uk/photo>

Hyprefocal distances and depth of field (metres)													Focal length: 40 mm				
													circle of confusion: 0.030 mm				
Aperture		f/1.7		f/2.		f/2.8		f/4.		f/5.6		f/8.		f/11.		f/16.	
Hyprefocal		31.8		26.7		18.9		13.4		9.47		6.71		4.75		3.37	
		near	far	near	far	near	far	near	far	near	far	near	far	near	far	near	far
Focus distance	0.8	0.78	0.82	0.78	0.82	0.77	0.83	0.76	0.85	0.74	0.87	0.72	0.90	0.69	0.95	0.65	1.04
	1.	0.97	1.03	0.97	1.04	0.95	1.05	0.93	1.08	0.91	1.11	0.87	1.17	0.83	1.26	0.78	1.40
	1.25	1.20	1.30	1.20	1.31	1.17	1.34	1.15	1.37	1.11	1.43	1.06	1.53	0.99	1.68	0.92	1.96
	1.5	1.43	1.57	1.42	1.59	1.39	1.63	1.35	1.68	1.30	1.77	1.23	1.92	1.15	2.17	1.04	2.67
	2.	1.88	2.13	1.86	2.16	1.81	2.23	1.74	2.34	1.66	2.52	1.55	2.83	1.41	3.42	1.26	4.85
	2.5	2.32	2.71	2.29	2.75	2.21	2.88	2.11	3.07	1.98	3.38	1.83	3.96	1.64	5.23	1.44	9.54
	3.	2.74	3.31	2.70	3.37	2.59	3.56	2.45	3.86	2.28	4.37	2.08	5.40	1.84	8.06	1.59	26.8
	4.	3.56	4.57	3.48	4.70	3.31	5.06	3.08	5.69	2.82	6.90	2.51	9.85	2.17	25.0	1.83	inf
	5.	4.32	5.93	4.22	6.14	3.96	6.78	3.64	7.96	3.28	10.6	2.87	19.5	2.44	inf	2.01	inf
	10.	7.61	14.6	7.28	16.0	6.54	21.2	5.72	39.5	4.86	inf	4.01	inf	3.21	inf	2.51	inf
	15.	10.2	28.4	9.61	34.2	8.36	72.6	7.07	inf	5.80	inf	4.62	inf	3.59	inf	2.73	inf
	20.	12.3	54.0	11.4	79.5	9.72	inf	8.01	inf	6.42	inf	5.01	inf	3.82	inf	2.86	inf
50.	19.4	inf	17.4	inf	13.7	inf	10.5	inf	7.94	inf	5.89	inf	4.31	inf	3.13	inf	

Hyperfocal distances and depth of field (metres)										Focal length: 45 mm				
										circle of confusion: 0.030 mm				
Aperture	f/2.		f/2.8		f/4.		f/5.6		f/8.		f/11.		f/16.	
Hyperfocal	33.8		23.9		16.9		12.0		8.48		6.01		4.26	
	near	far	near	far	near	far	near	far	near	far	near	far	near	far
Focus distance	0.8	0.78 0.82	0.78 0.83	0.77 0.84	0.75 0.85	0.73 0.88	0.71 0.92	0.68 0.97						
	1	0.97 1.03	0.96 1.04	0.95 1.06	0.93 1.09	0.90 1.13	0.86 1.19	0.82 1.29						
	1.25	1.21 1.30	1.19 1.32	1.17 1.35	1.14 1.39	1.09 1.46	1.04 1.57	0.97 1.75						
	1.5	1.44 1.57	1.41 1.60	1.38 1.64	1.34 1.71	1.28 1.81	1.21 1.98	1.12 2.29						
	2	1.89 2.12	1.85 2.18	1.79 2.26	1.72 2.39	1.62 2.60	1.51 2.97	1.37 3.73						
	2.5	2.33 2.70	2.27 2.79	2.18 2.93	2.07 3.15	1.94 3.53	1.77 4.25	1.58 5.98						
	3	2.76 3.29	2.67 3.42	2.55 3.64	2.40 3.99	2.22 4.62	2.01 5.94	1.76 10.0						
	4	3.58 4.53	3.43 4.79	3.24 5.22	3.00 5.98	2.72 7.53	2.41 11.9	2.06 64.0						
	5	4.36 5.86	4.14 6.31	3.87 7.08	3.53 8.55	3.15 12.1	2.73 29.5	2.30 inf						
	10	7.72 14.2	7.06 17.2	6.29 24.4	5.45 60.3	4.59 inf	3.75 inf	2.98 inf						
15	10.4 26.9	9.22 40.2	7.95 131.8	6.66 inf	5.41 inf	4.28 inf	3.30 inf							
20	12.6 48.9	10.9 122.1	9.16 inf	7.48 inf	5.94 inf	4.60 inf	3.49 inf							
50	20.2 inf	16.2 inf	12.6 inf	9.64 inf	7.22 inf	5.33 inf	3.89 inf							

Hyp̄rfocal distances and depth of field (metres)										Focal length: 40 mm			
										circle of confusion: 0.030 mm			
Aperture		f/2.8		f/4.		f/5.6		f/8.		f/11.		f/16.	
Hyp̄rfocal		18.9		13.4		9.47		6.71		4.75		3.37	
Focus distance		near	far	near	far	near	far	near	far	near	far	near	far
	0.8	0.77	0.83	0.76	0.85	0.74	0.87	0.72	0.90	0.69	0.95	0.65	1.04
	1.	0.95	1.05	0.93	1.08	0.91	1.11	0.87	1.17	0.83	1.26	0.78	1.40
	1.25	1.17	1.34	1.15	1.37	1.11	1.43	1.06	1.53	0.99	1.68	0.92	1.96
	1.5	1.39	1.63	1.35	1.68	1.30	1.77	1.23	1.92	1.15	2.17	1.04	2.67
	2.	1.81	2.23	1.74	2.34	1.66	2.52	1.55	2.83	1.41	3.42	1.26	4.85
	2.5	2.21	2.88	2.11	3.07	1.98	3.38	1.83	3.96	1.64	5.23	1.44	9.54
	3.	2.59	3.56	2.45	3.86	2.28	4.37	2.08	5.40	1.84	8.06	1.59	26.8
	4.	3.31	5.06	3.08	5.69	2.82	6.90	2.51	9.85	2.17	25.0	1.83	inf
	5.	3.96	6.78	3.64	7.96	3.28	10.6	2.87	19.5	2.44	inf	2.01	inf
	10.	6.54	21.2	5.72	39.5	4.86	inf	4.01	inf	3.21	inf	2.51	inf
	15.	8.36	72.6	7.07	inf	5.80	inf	4.62	inf	3.59	inf	2.73	inf
	20.	9.72	inf	8.01	inf	6.42	inf	5.01	inf	3.82	inf	2.86	inf
	50.	13.7	inf	10.5	inf	7.94	inf	5.89	inf	4.31	inf	3.13	inf

Hyperfocal distances and depth of field (metres)													
Focal length: 42 mm													
circle of confusion: 0.030 mm													
Aperture	f/2.8		f/4.		f/5.6		f/8.		f/11.		f/16.		f/22.
Hyperfocal	20.8		14.7		10.4		7.39		5.24		3.72		2.64
Focus distance	near far		near far		near far		near far		near far		near far		near far
	0.8	0.77 0.83	0.76 0.84	0.75 0.86	0.73 0.89	0.70 0.94	0.66 1.01	0.62 1.13					
	1.	0.96 1.05	0.94 1.07	0.92 1.10	0.88 1.15	0.84 1.23	0.79 1.35	0.73 1.58					
	1.25	1.18 1.33	1.16 1.36	1.12 1.41	1.07 1.50	1.01 1.63	0.94 1.86	0.85 2.34					
	1.5	1.40 1.61	1.36 1.67	1.32 1.74	1.25 1.87	1.17 2.08	1.07 2.49	0.96 3.42					
	2.	1.83 2.21	1.76 2.31	1.68 2.46	1.58 2.73	1.45 3.21	1.30 4.28	1.14 8.11					
	2.5	2.24 2.84	2.14 3.00	2.02 3.27	1.87 3.76	1.70 4.74	1.50 7.55	1.28 46.2					
	3.	2.63 3.50	2.50 3.76	2.34 4.19	2.14 5.02	1.91 6.96	1.66 15.4	1.40 inf					
	4.	3.36 4.94	3.15 5.47	2.90 6.46	2.60 8.67	2.27 16.8	1.93 inf	1.59 inf					
	5.	4.04 6.57	3.74 7.54	3.39 9.56	2.99 15.4	2.56 108.6	2.13 inf	1.72 inf					
	10.	6.76 19.2	5.96 31.0	5.11 238.1	4.25 inf	3.43 inf	2.70 inf	2.07 inf					
	15.	8.72 53.5	7.43 inf	6.15 inf	4.94 inf	3.87 inf	2.96 inf	2.22 inf					
	20.	10.2 500.4	8.48 inf	6.85 inf	5.38 inf	4.13 inf	3.11 inf	2.30 inf					
	50.	14.7 inf	11.4 inf	8.61 inf	6.41 inf	4.71 inf	3.43 inf	2.47 inf					

Hyperfocal distances and depth of field (metres)													
Focal length: 42 mm													
circle of confusion: 0.030 mm													
Aperture	f/1.7		f/2.		f/2.8		f/4.		f/5.6		f/8.		f/11.
Hyperfocal	35.0		29.4		20.8		14.7		10.4		7.39		5.24
Focus distance	near far		near far		near far		near far		near far		near far		near far
	0.8	0.78 0.82	0.78 0.82	0.77 0.83	0.76 0.84	0.75 0.86	0.73 0.89	0.70 0.94	0.66 1.01				
	1.	0.97 1.03	0.97 1.03	0.96 1.05	0.94 1.07	0.92 1.10	0.88 1.15	0.84 1.23	0.79 1.35				
	1.25	1.21 1.29	1.20 1.30	1.18 1.33	1.16 1.36	1.12 1.41	1.07 1.50	1.01 1.63	0.94 1.86				
	1.5	1.44 1.57	1.43 1.58	1.40 1.61	1.36 1.67	1.32 1.74	1.25 1.87	1.17 2.08	1.07 2.49				
	2.	1.89 2.12	1.88 2.14	1.83 2.21	1.76 2.31	1.68 2.46	1.58 2.73	1.45 3.21	1.30 4.28				
	2.5	2.34 2.69	2.31 2.73	2.24 2.84	2.14 3.00	2.02 3.27	1.87 3.76	1.70 4.74	1.50 7.55				
	3.	2.77 3.28	2.73 3.34	2.63 3.50	2.50 3.76	2.34 4.19	2.14 5.02	1.91 6.96	1.66 15.4				
	4.	3.59 4.51	3.53 4.62	3.36 4.94	3.15 5.47	2.90 6.46	2.60 8.67	2.27 16.8	1.93 inf				
	5.	4.38 5.83	4.28 6.01	4.04 6.57	3.74 7.54	3.39 9.56	2.99 15.4	2.56 108.6	2.13 inf				
	10.	7.78 14.0	7.47 15.1	6.76 19.2	5.96 31.0	5.11 238.1	4.25 inf	3.43 inf	2.70 inf				
	15.	10.5 26.2	9.94 30.5	8.72 53.5	7.43 inf	6.15 inf	4.94 inf	3.87 inf	2.96 inf				
	20.	12.7 46.6	11.9 62.3	10.2 500.4	8.48 inf	6.85 inf	5.38 inf	4.13 inf	3.11 inf				
	50.	20.6 inf	18.5 inf	14.7 inf	11.4 inf	8.61 inf	6.41 inf	4.71 inf	3.43 inf				