

Entocentric lenses with folded optical path

vicotar®

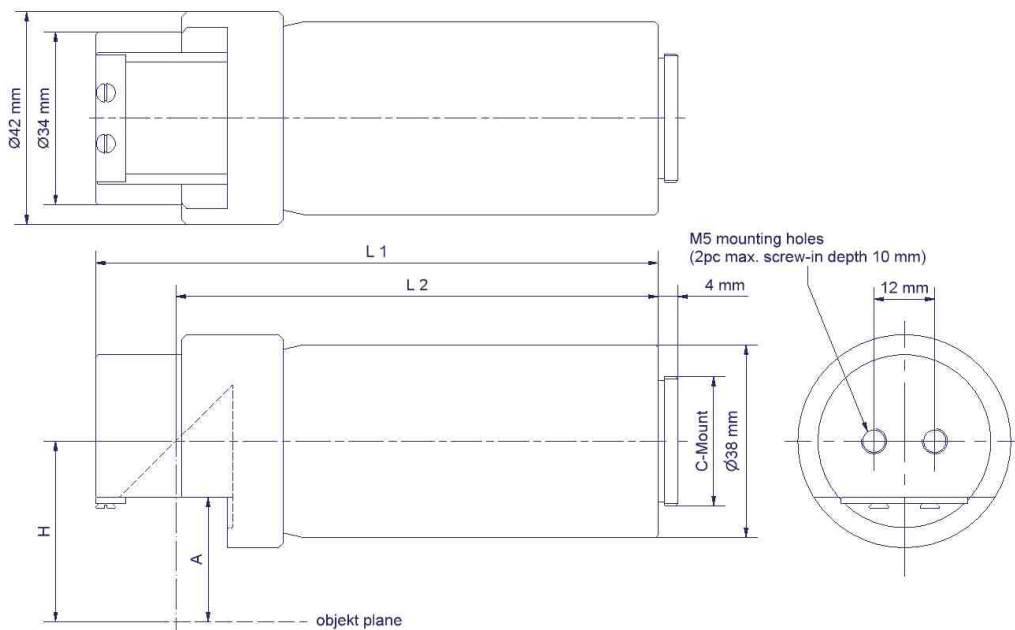
RWO series

Product features

- Lenses which bend the optical path through a right angle
- Application for matrix and line cameras up to sensor diagonal/length 11 mm
- To used when the mounting space is restricted
- Low distortion
- Manual operated iris aperture with fixing
- Robust industrial design: dust-proof, shock-proof
- C-mount (thread connection)



Engineering drawing



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Manual



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Properties

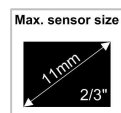
Optical properties

Spectral range 380...900nm / colour-corrected / fast lenses

Mechanical properties

Flange focal distance 17.53mm / max. diameter of lenses 42mm / two M5 mounting holes on the end face / camera side filter thread M20 x 0.5 / environmental temperature -10°C ... 50°C

Options



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Optical data

Name	Order no.	Lateral magnification	Image side aperture (adjustable)	Field of view for 1" sensor [mm ²]	Field of view for 2/3" sensor [mm ²]	Field of view for 1/2" sensor [mm ²]	Field of view for 1/3" sensor [mm ²]	Field of view for 1/4" sensor [mm ²]
RWO 30-1,3	2-10-320	-1,3 : 1	0,044 ... 0,012	--	6,8 × 5,1	4,9 × 3,7	3,7 × 2,8	2,8 × 2,1
RWO 30-1,0	2-10-321	-1 : 1	0,050 ... 0,014	--	8,8 × 6,6	6,4 × 4,8	4,8 × 3,6	3,6 × 2,7
RWO 30-0,89	2-10-322	-1 : 1,12	0,054 ... 0,015	--	9,9 × 7,4	7,2 × 5,4	5,4 × 4,0	4,0 × 3,0
RWO 30-0,67	2-10-323	-1 : 1,49	0,061 ... 0,017	--	13,1 × 9,9	9,6 × 7,2	7,2 × 5,4	5,4 × 4,0
RWO 30-0,59	2-10-324	-1 : 1,69	0,064 ... 0,018	--	14,9 × 11,2	10,9 × 8,1	8,1 × 6,1	6,1 × 4,6
RWO 30-0,42	2-10-325	-1 : 2,38	0,072 ... 0,020	--	21,0 × 15,7	15,2 × 11,4	11,4 × 8,6	8,6 × 6,4
RWO 30-0,38	2-10-326	-1 : 2,63	0,074 ... 0,021	--	23,2 × 17,4	16,8 × 12,6	12,6 × 9,5	9,5 × 7,1
RWO 50-0,37	2-10-331	-1 : 2,70	0,088 ... 0,009	--	23,8 × 17,8	17,3 × 13,0	13,0 × 9,7	9,7 × 7,3
RWO 30-0,35	2-10-327	-1 : 2,86	0,083 ... 0,022	--	25,1 × 18,9	18,3 × 13,7	13,7 × 10,3	10,3 × 7,7
RWO 30-0,24	2-10-328	-1 : 4,17	0,083 ... 0,024	--	36,7 × 27,5	26,7 × 20,0	20,0 × 15,0	15,0 × 11,3
RWO 30-0,18	2-10-329	-1 : 5,56	0,087 ... 0,025	--	48,9 × 36,7	35,6 × 26,7	26,7 × 20,0	20,0 × 15,0
RWO 50-0,17	2-10-332	-1 : 5,88	0,094 ... 0,010	--	51,8 × 38,8	37,7 × 28,2	28,2 × 21,2	21,2 × 15,9
RWO 50-0,12	2-10-333	-1 : 8,33	0,099 ... 0,010	--	73,3 × 55,0	53,3 × 40,0	40,0 × 30,0	30,0 × 22,5
RWO 30-0,067	2-10-330	-1 : 14,93	0,097 ... 0,028	--	131 × 99	95,5 × 71,6	71,6 × 53,7	53,7 × 40,3

1" - 12.8 x 9.6 mm² | 2/3" - 8.8 x 6.6 mm² | 1/2" - 6.4 x 4.8 mm² | 1/3" - 4.8 x 3.6 mm² | 1/4" - 3.6 x 2.7 mm²

Mechanical data

Name	Order no.	Max. object field diameter	Working distance	Total length L1	Length L2	Height of opt. axis H	Weight
RWO 30-1,3	2-10-320	8,5 mm	17 mm	112 mm	96 mm	29 mm	270 g
RWO 30-1,0	2-10-321	11 mm	25 mm	102 mm	86 mm	37 mm	250 g
RWO 30-0,89	2-10-322	12,4 mm	29 mm	99 mm	83 mm	41 mm	230 g
RWO 30-0,67	2-10-323	16,4 mm	41 mm	92 mm	76 mm	53 mm	200 g
RWO 30-0,59	2-10-324	18,6 mm	47 mm	89 mm	73 mm	59 mm	190 g
RWO 30-0,42	2-10-325	26,2 mm	67 mm	84 mm	68 mm	79 mm	170 g
RWO 30-0,38	2-10-326	29,0 mm	77 mm	83 mm	67 mm	89 mm	160 g
RWO 50-0,37	2-10-331	29,7 mm	157 mm	111 mm	95 mm	169 mm	120 g
RWO 30-0,35	2-10-327	31,4 mm	83 mm	82 mm	66 mm	95 mm	150 g
RWO 30-0,24	2-10-328	45,8 mm	122 mm	79 mm	63 mm	134 mm	130 g
RWO 30-0,18	2-10-329	61,1 mm	170 mm	77 mm	61 mm	184 mm	120 g
RWO 50-0,17	2-10-332	64,7 mm	310 mm	101 mm	86 mm	322 mm	110 g
RWO 50-0,12	2-10-333	91,7 mm	470 mm	99 mm	83 mm	472 mm	100 g
RWO 30-0,067	2-10-330	164 mm	450 mm	73 mm	57 mm	462 mm	100 g

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Important advice

Care instruction

Clean easily dirty lens with an optics brush or cleaned air. Adherent contamination can be removed by using an optical cleaning tissue. Please use only alcohol as a solvent, do not use acetone or other chemicals.

Accessories

Order no.	Name	Description
2-91-131	IR M20,5 x 0,5	daylight suppression filter for telecentric lens-systems
2-91-151	NF4 M20,5 x 0,5	neutral density filter, 4 x for telecentric lens-systems
2-91-171	NF1000 M20,5 x 0,5	neutral density filter, 1000 x for telecentric lens-systems
2-91-259	RF M20,5 x 0,5	red filter

Intended use for accessories

RWO lens with filter

