

Bi-telecentric lens for 1" cameras (VCM110 series)

LS-VCM110 series · Telecentric lenses · 16 models



Bi-telecentric lens series for sensors up to 1" (16.6 mm dia.), C-Mount. Models are named by object field of view (dia. mm); each lists magnification, working distance, F/#, MTF30, depth of field, distortion <0.1% and telecentricity <0.1°.

Features

- Matrix design with extremely high imaging quality
- Standard FOV from 26 to 240 mm, covering almost all industrial imaging applications
- Compatible with all C-mount cameras from 1/2.5" to 1.1", and F/M-mount cameras from 4/3" to 59 mm
- More than 168 standard types and hundreds of customised items
- Excellent F-number, high telecentricity, extremely low distortion, very large DoF
- Each lens comes with an imaging quality test report
- Lens mount with conveniently adjustable flange distance (AL)
- Matrix-design with extremely high imaging quality
- Compatible with all C mount cameras from 1/2.5" to 1.1", and F/M mount cameras from 4/3" to 59 mm
- Excellent F number, high telecentricity, extremely low distortion, super large DoF

Applications

- Industrial imaging applications (standard FOV 26 to 240 mm)

Common specifications

Max sensor size (dia. mm)	16.6(1")
Distortion (% max)	<0.1
Telecentricity (deg max)	<0.1
Mount (selection chart)	C
FOV range (dia. mm)	26 - 240
Telecentricity (° max)	<0.1
Mount	C-Mount
Detector	1"

Ordering code: VCM110-<FOV diagonal mm, P variant>-AL (LS-VCM125-64-AL: 125 = largest compatible sensor 1/2.5", 64 = diagonal of FOV 64 mm, AL = lens mount with adjustable flange distance)

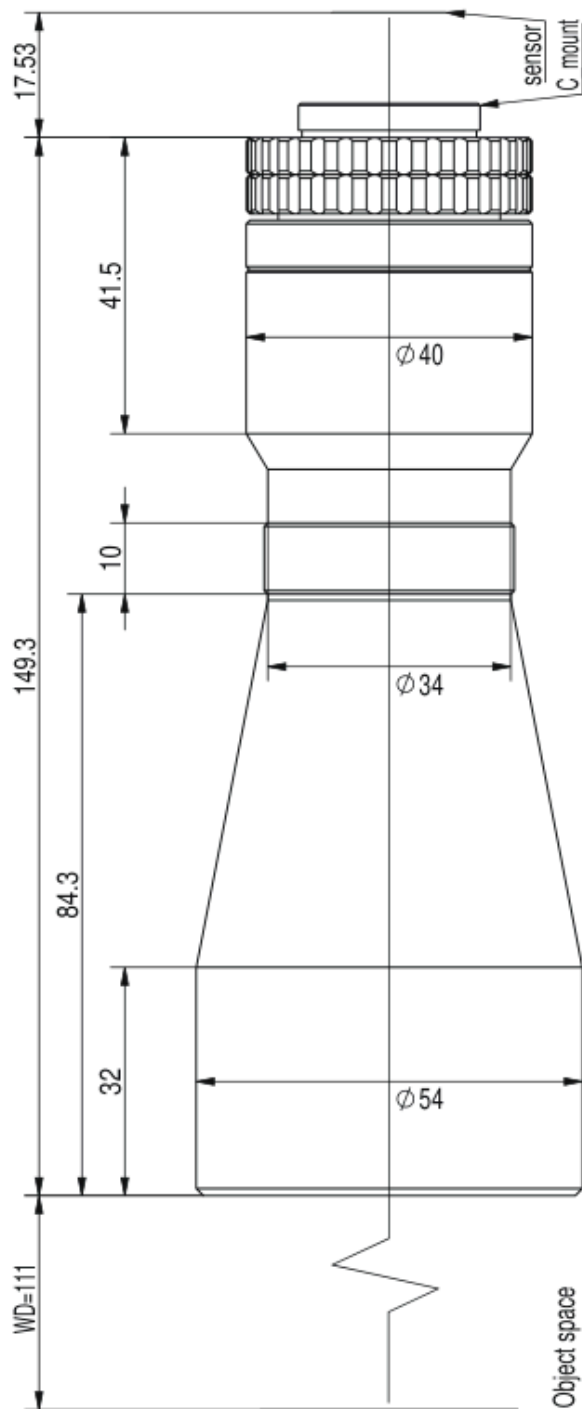
Models

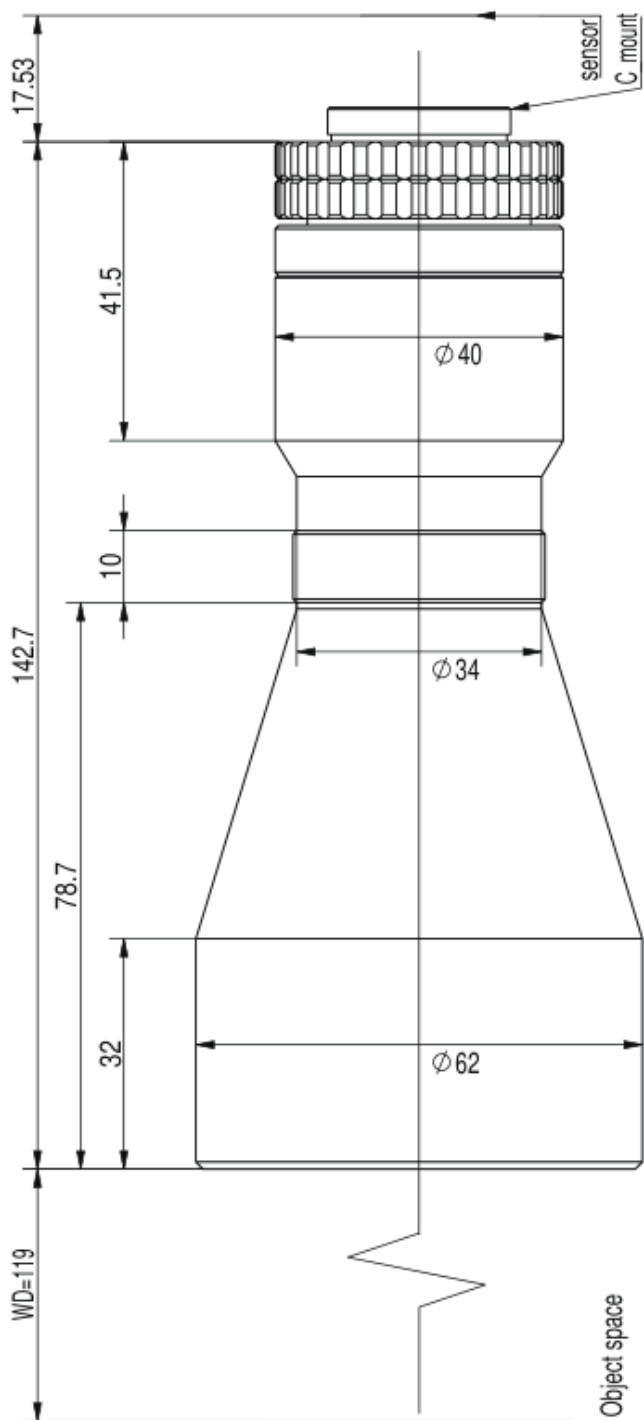
Model	FOV (dia. mm)	MTF30 (lp/mm)	Length (mm)	Weight (kg)	Magnification (x)	Working distance (mm)	Depth of field (mm)
LS-VCM110-26-AL	26	>80	133.3	0.4	0.641	72±2	±1
LS-VCM110-36-AL	36	>90	149.3	0.5	0.461	111±2	±2
LS-VCM110-42-AL	42	>100	142.7	0.7	0.396	119±2	±2
LS-VCM110-48-AL	48	>100	154.5	0.6	0.347	128±2	±1.5
LS-VCM110-56-AL	56	>100	176	0.9	0.298	138±2	±2
LS-VCM110-64-AL	64	>95	164.5	0.9	0.260	187±2	±4.5
LS-VCM110-64P-AL	64	>105	182.7	1.2	0.260	159±2	±4
LS-VCM110-72-AL	72	>105	206	1.2	0.231	178±2	±4
LS-VCM110-80-AL	80	>100	198.7	2.0	0.208	229±2	±5
LS-VCM110-100-AL	93	>95	214.8	3.2	0.179	254±3	±6
LS-VCM110-110-AL	111	>100	274	4.2	0.150	251±3	±8
LS-VCM110-136-AL	136	>100	391.2	7.0	0.122	288±4	±9
LS-VCM110-150-AL	150	>100	352.5	6.5	0.111	301±4	±12
LS-VCM110-170-AL	169	>100	418	7.0	0.098	318±4	±15
LS-VCM110-240-AL	240	>100	571	17.6	0.069	410±5	±26
LS-VCM110-16.6	-	>125	90.7	0.2	1.000	24±1	±0.6@F16

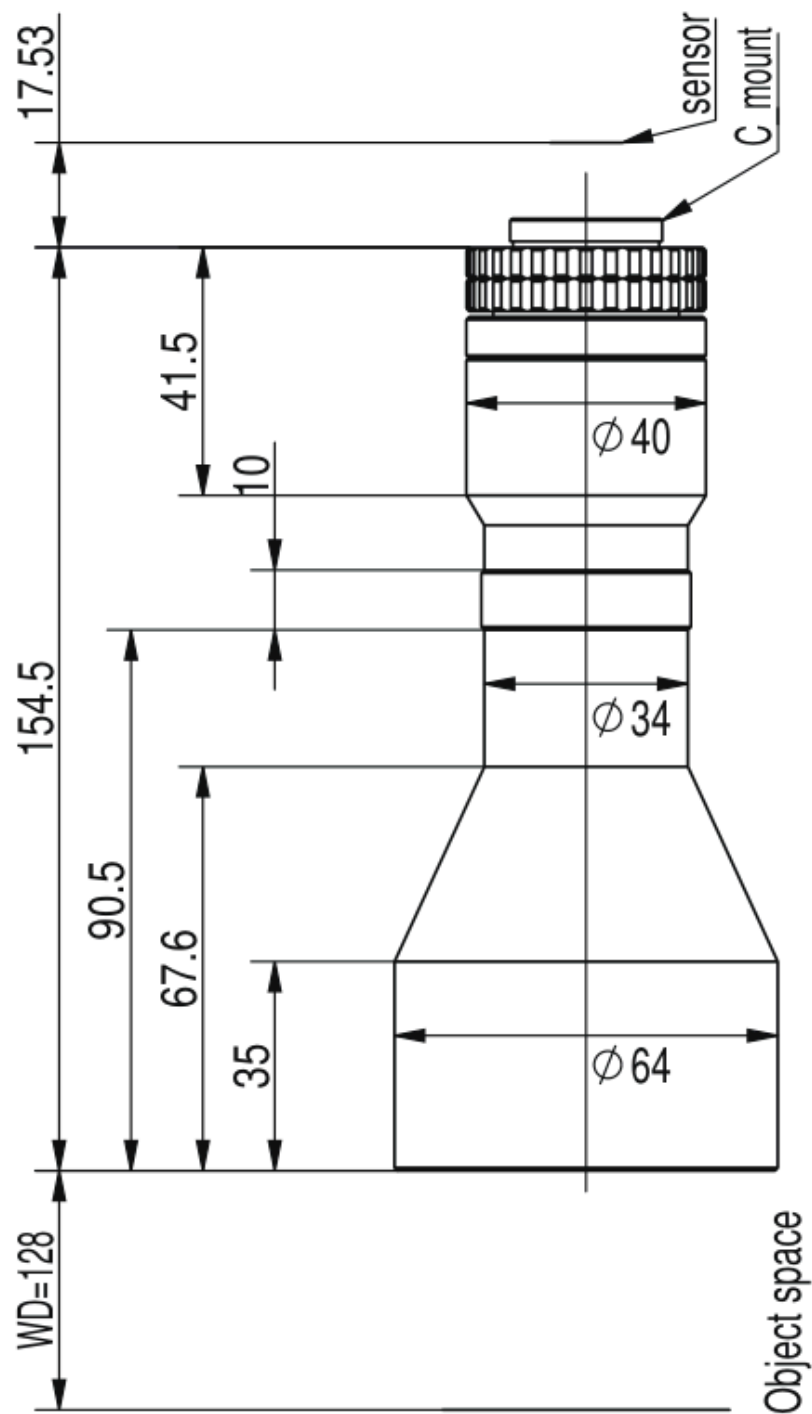
More values per model (Mag. (x), WD (mm), F/#, DoF (mm), I/O (mm), Mount shown in drawing, Field of view on 1" KAI-04050(12.85x9.64) (mm), Field of view on 1" KAI-04050(12.85x9.64) (mm x mm), Field of view (dia. mm), Object-to-image distance I/O (mm), Field of view with 1" KAI-04050(12.85x9.64) (mm), Sensor format...) are on each product page.

Dimensions









Performance

FOV (mm)																	Mount
CCD (mm)	Mag(x)	26	36	42	48	56	64	64P	72.00	80	100	110	136	150	170	240	
LS-VCM125 (1/2.5"7.2mm)		0.277	0.199	0.172	0.15	0.129	0.113	0.1122	0.1	0.09	0.0771	0.0647	0.0529	0.048	0.0424	0.03	C
LS-VCM120 (1/2"8.0mm)		0.309	0.2217	0.192	0.167	0.144	0.126	0.125	0.112	0.1002	0.0859	0.072	0.0589	0.054	0.0472	0.0334	C
LS-VCM118 (1/1.8"9.0mm)		0.348	0.25	0.217	0.188	0.162	0.142	0.141	0.126	0.113	0.097	0.082	0.066	0.061	0.053	0.038	C
LS-VCM238 (2/3"11.4mm)		0.409	0.293	0.252	0.221	0.19	0.166	0.165	0.147	0.132	0.114	0.095	0.078	0.071	0.063	0.044	C
LS-VCM208 (2/3"11.4mm)		0.439	0.314	0.271	0.238	0.204	0.179	0.179	0.159	0.143	0.123	0.103	0.084	0.076	0.067	0.048	C
LS-VCM110 (1"16.6mm)		0.641	0.461	0.396	0.347	0.298	0.26	0.26	0.231	0.208	0.179	0.15	0.122	0.111	0.098	0.069	C
LS-VCM111 (1"18.4mm)		0.72	0.516	0.444	0.389	0.334	0.293	0.292	0.26	0.233	0.201	0.168	0.138	0.125	0.11	0.078	C
LS-VCM179 (1.75"29mm)		1.115	0.798	0.686	0.603	0.517	0.456	0.452	0.401	0.36	0.312	0.261	0.214	0.193	0.171	0.12	F/M42
LS-VCM219 (2"33mm)		1.269	0.912	0.781	0.687	0.589	0.518	0.514	0.458	0.412	0.354	0.296	0.242	0.22	0.194	0.137	F/M42
LS-VCM71M (39mm)		1.503	1.08	0.929	0.814	0.698	0.613	0.61	0.543	0.487	0.419	0.351	0.287	0.261	0.23	0.163	F/M58
LS-VCM30F (44mm)		1.503	1.208	1.0348	0.911	0.781	0.686	0.682	0.607	0.546	0.4681	0.3924	0.321	0.292	0.257	0.182	F/M58
LS-VCM10K (59mm)		2.264	1.626	1.396	1.256	1.051	0.92	0.916	0.817	0.735	0.63	0.528	0.432	0.392	0.346	0.245	M72
WD (mm)		72	111	119	128	138	187	159	178	229	254	251	288	301	318	410	

Product views

