

Bi-telecentric lens for 1.75" cameras (VCM175 series)

LS-VCM175 series · Telecentric lenses · 15 models



Bi-telecentric lens series for sensors up to 1.75" (29 mm dia.), F-Mount/Other. 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)	29(1.75")
Distortion (% max)	<0.1
Telecentricity (deg max)	<0.1
Mount (selection chart)	F/M42
FOV range (dia. mm)	26 - 240
Telecentricity (° max)	<0.1
Mount	F-Mount/Other
Detector	1.75"(29mm)

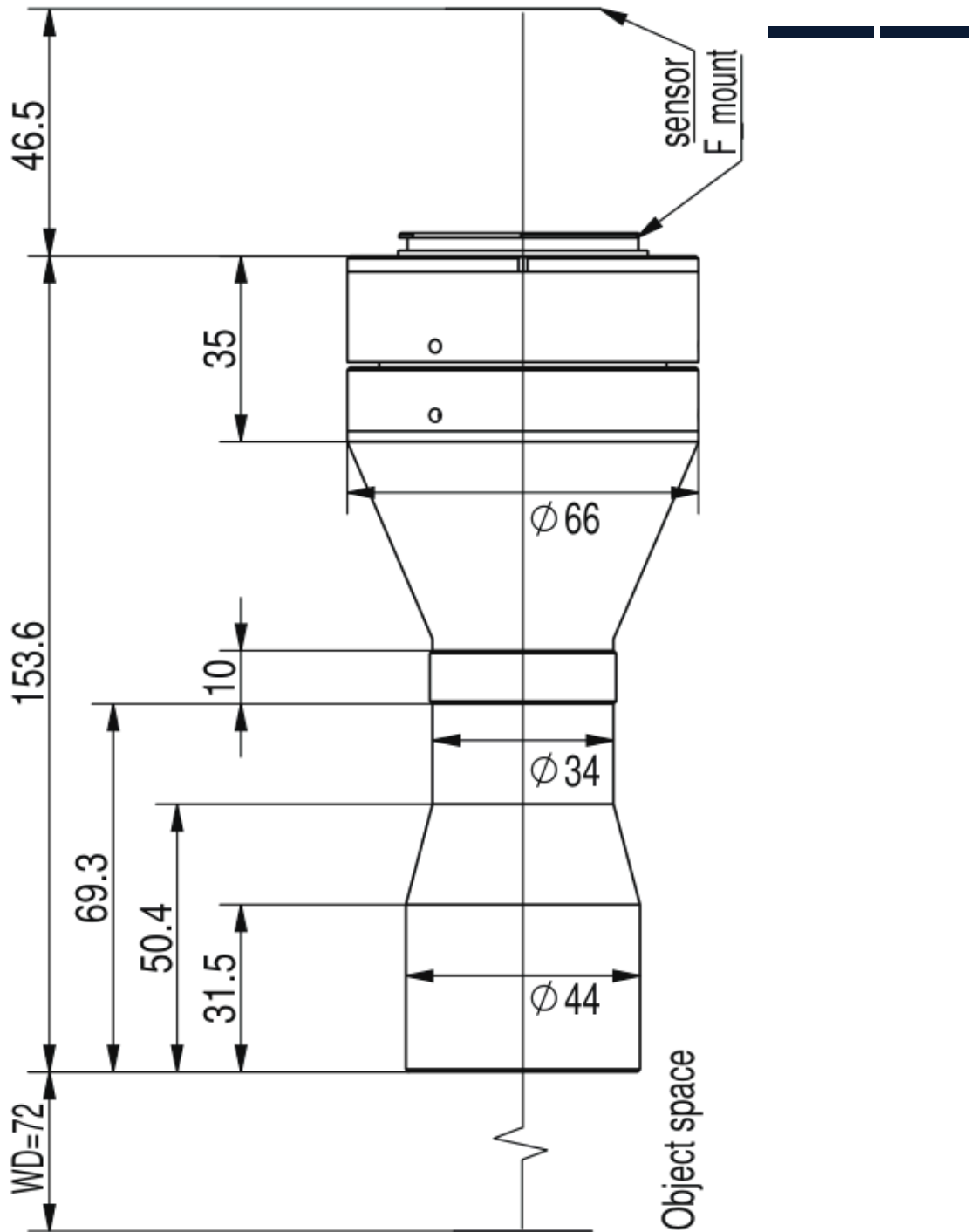
Ordering code: VCM175-<FOV diagonal mm, P variant>-AL (LS-VCM125-64-AL: 125 = largest compatible sensor 1/2.5", 64 = diagonal of FOV 64 mm, AL = lens mount with adjustable flange distance)

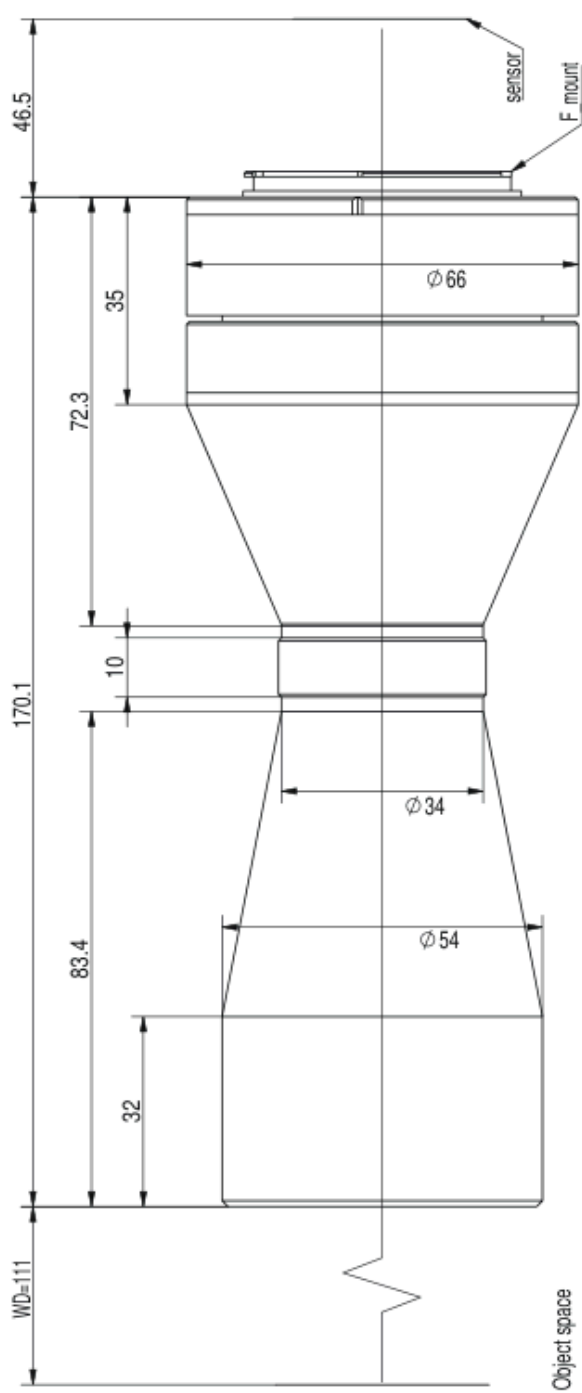
Models

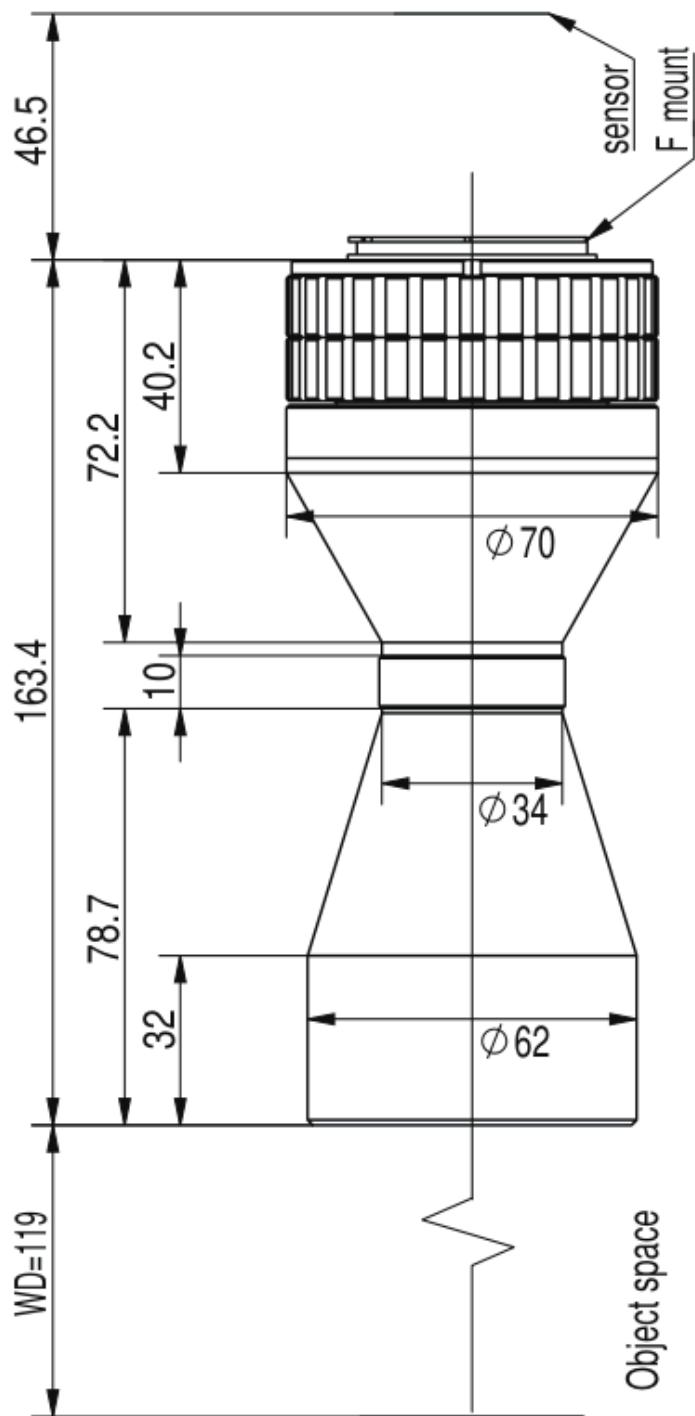
Model	FOV (dia. mm)	Mag. (x)	WD (mm)	F/#	MTF30 (lp/mm)	DoF (mm)	I/O (mm)
LS-VCM175-26-AL	26	1.115	72±2	15	>55	±1.2	272
LS-VCM175-36-AL	36	0.798	111±2	12	>70	±1	326.5
LS-VCM175-42-AL	42	0.686	119±2	12	>70	±2	328.7
LS-VCM175-48-AL	48	0.603	128±2	10.5	>75	±1	349
LS-VCM175-56-AL	56	0.517	138±2	10	>85	±2	381
LS-VCM175-64-AL	63	0.456	187±2	15	>65	±2.5	421.2
LS-VCM175-64P-AL	64	0.452	159±2	6	>80	±2	408.6
LS-VCM175-72-AL	72	0.401	178±2	6.8	>80	±2	453.6
LS-VCM175-80-AL	80	0.360	229±2	16	>70	±6	494.7
LS-VCM175-100-AL	93	0.312	254±3	12	>70	±5	536.5
LS-VCM175-110-AL	111	0.261	251±3	8	>85	±6	592
LS-VCM175-136-AL	136	0.214	288±4	8	>85	±7	746.5
LS-VCM175-150-AL	150	0.193	301±4	6.8	>80	±8	720.5
LS-VCM175-170-AL	168	0.171	318±4	8	>85	±12	803.4
LS-VCM175-240-AL	240	0.120	410±5	8	>85	±24	1043.5

More values per model (Length (mm), Weight (kg), Mount shown in drawing, Field of view on 1.75"CMV12000(22.53x16.90) (mm), Magnification (x), Working distance (mm), Depth of field (mm), Field of view on 1.75"CMV12000(22.53x16.90) (mm x mm), Field of view (dia. mm), Object-to-image distance I/O (mm), Field of view with 1.75"CMV12000(22.53x16.90) (mm), Model (spec table)...) are on each product page.

Dimensions









CCD (mm)	FDV (mm)																Mount
	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-VCM176 (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-VCM218 (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-VCM16K (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

