

Bi-telecentric lens for 59mm cameras (VCM16K series)

LS-VCM16K series · Telecentric lenses · 15 models



Bi-telecentric lens series for sensors up to 16K line scan (59 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)	59(16K)
Distortion (% max)	<0.1
Telecentricity (deg max)	<0.1
Mount (selection chart)	M72
FOV range (dia. mm)	26 - 240
Telecentricity (° max)	<0.1
Mount	F-Mount/Other
Detector	59mm

Ordering code: VCM16K-<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)

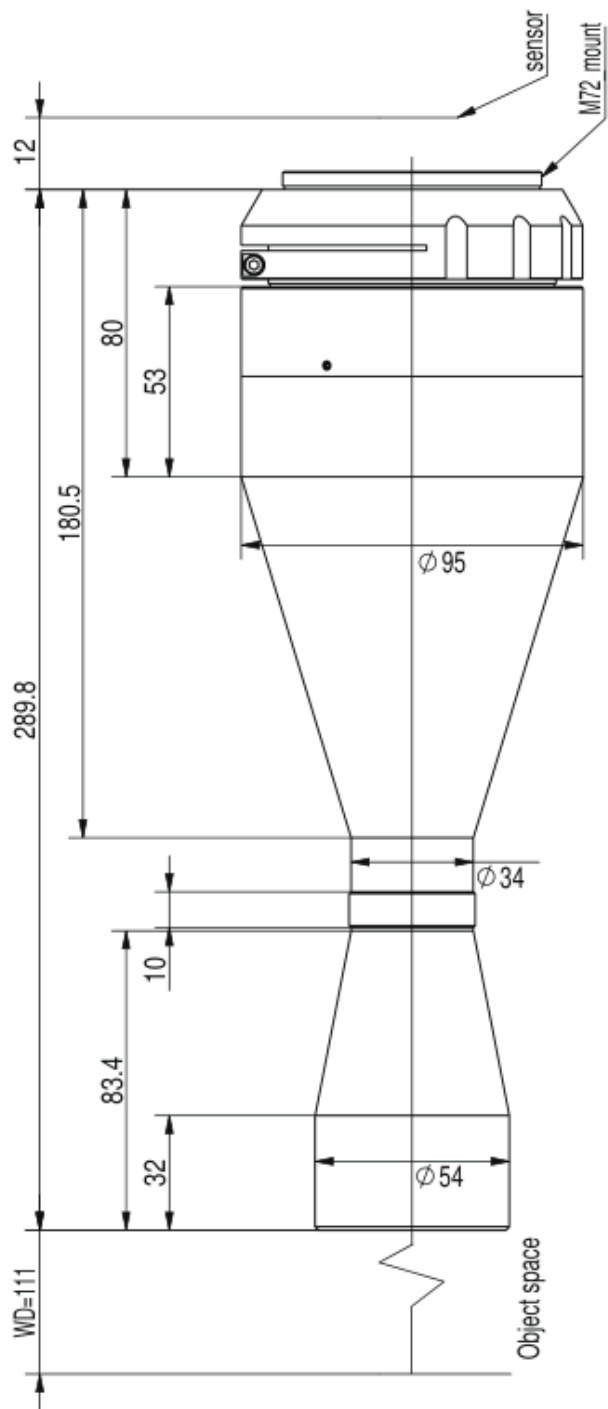
Models

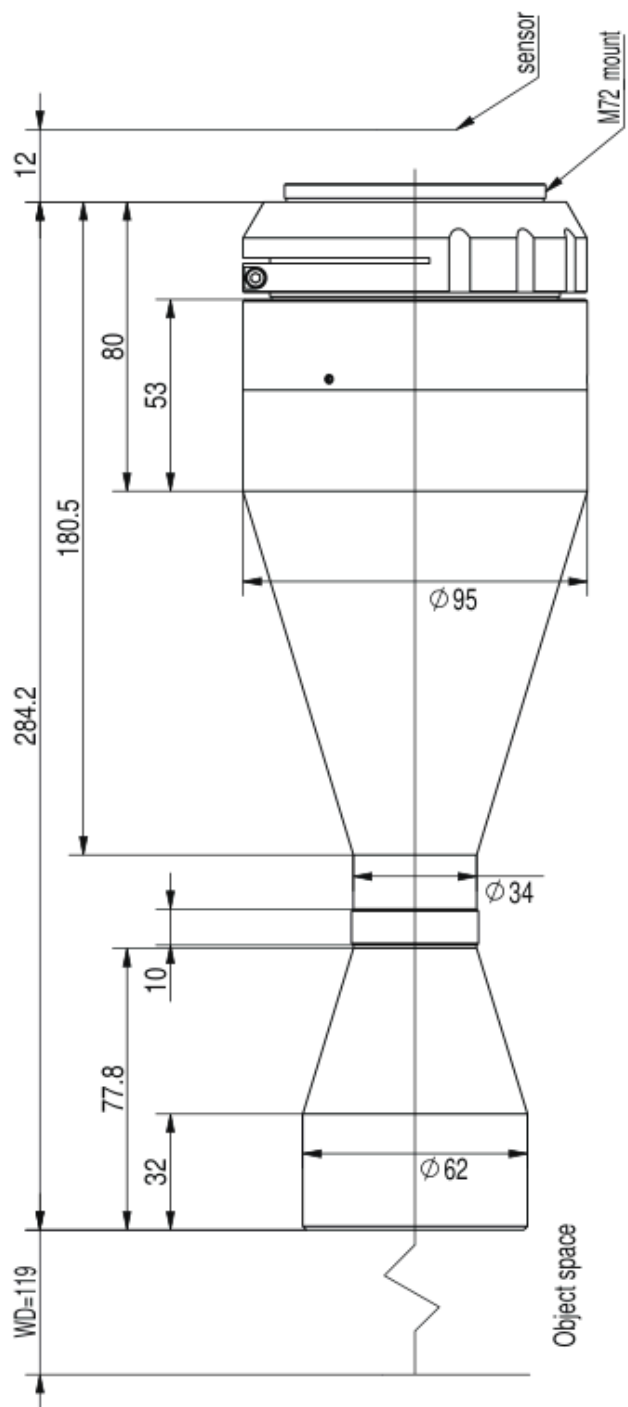
Model	FOV (dia. mm)	Mag. (x)	WD (mm)	F/#	MTF30 (lp/mm)	DoF (mm)	I/O (mm)
LS-VCM16K-26-AL	26	2.264	72±2	30.8	>30	±1	358.8
LS-VCM16K-36-AL	36	1.626	111±2	22	>40	±1	412.8
LS-VCM16K-42-AL	42	1.396	119±2	25	>35	±1.5	415.2
LS-VCM16K-48-AL	48	1.256	128±2	21	>45	±1.5	436
LS-VCM16K-56-AL	56	1.051	138±2	15	>65	±1.3	467.5
LS-VCM16K-64-AL	64	0.920	187±2	25	>35	±2.5	505
LS-VCM16K-64P-AL	64	0.916	159±2	12	>75	±1.3	495.3
LS-VCM16K-72-AL	72	0.817	178±2	13.8	>55	±2	540
LS-VCM16K-80-AL	80	0.735	229±2	25	>35	±4	581.2
LS-VCM16K-100-AL	93	0.630	254±3	22	>45	±3.5	458
LS-VCM16K-110-AL	111	0.528	251±3	10	>85	±2.6	511.4
LS-VCM16K-136-AL	136	0.432	288±4	10	>100	±3.5	666
LS-VCM16K-150-AL	150	0.392	301±4	15	>70	±6	640
LS-VCM16K-170-AL	170	0.346	318±4	8.5	>105	±4	722.8
LS-VCM16K-240-AL	240	0.245	410±5	8.7	>115	±8	967.8

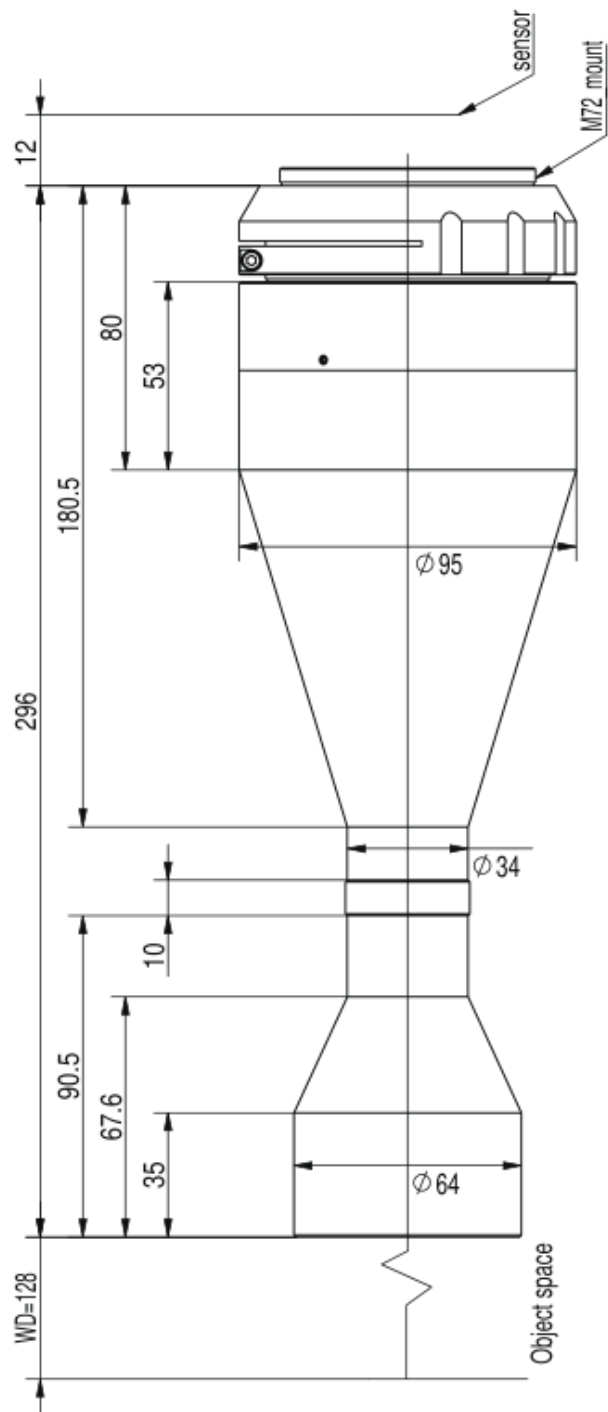
More values per model (Length (mm), Weight (kg), Mount shown in drawing, Field of view on 16Kx3.5/3.53µm(57.4mm) (mm), Field of view on 8Kx7um/7.04µm(57.4mm) (mm), Magnification (x), Working distance (mm), Depth of field (mm), Field of view (dia. mm), Object-to-image distance I/O (mm), Field of view with 16Kx3.5/3.53µm(57.4mm), Field of view with 8Kx7um/7.04µm(57.4mm)...) are on each product page.

Dimensions









Performance

FDV (mm)		26	36	42	48	56	64	64P	72.00	80	100	110	136	150	170	240	Mount
CCD (mm)	Mag (x)																
LS-VCM128	(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-VCM178	(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

