

Bi-telecentric lens for 1.1" sensor (X11 series)

LS-X11 series · Telecentric lenses · 22 models



Bi-telecentric C-mount lens supporting 1.1" (dia. 19.5 mm) target-face cameras, with an ultra-low-distortion bilateral telecentric optical path, large depth of field and a hardware measurement error below 0.3 pixel over the full field of view.

Features

- Maximum support for a 1.1" dia. 19.5 mm target face camera
- Excellent bilateral telecentric optical path, ultra low distortion design
- Large depth of field design for high and low difference imaging products
- High-precision tuning: hardware measurement error in the full field of view is <0.3 pixel
- Lightweight fastening structure designed to perform stably at high speed
- 25 million pixels
- Coaxial version available (C suffix, LS-HF110-1X11C)

Applications

- Imaging products with high and low differences (large depth of field)

Common specifications

Mount	C
Sensor size	1.1" dia.18.5mm (table); text: 1.1" dia. 19.5 mm target face
Resolution	25 million pixels

Ordering code: HF<WD>-<magnification>X11[C = coaxial]

Models

Model	Lighting mode	Magnification (X)	Working distance (mm)	DOF (mm)	Iris (F)	MTF>0.3 (LP/mm)	Telecentricity (°)
LS-HF110-15X11	non-coaxial	1.5	110	1mm	F11	120	<0.05
LS-HF110-1X11	non-coaxial	1	110	1.25mm	F7	120	<0.05
LS-HF110-1X11C	coaxial	1	110	1.25mm	F7	120	<0.05
LS-HF220-1X11	non-coaxial	1	220	0.68mm	F8.3	145	<0.05

LS-HF110-08X11	non-coaxial	0.8	110	2.5mm	F6	145	<0.05
LS-HF220-08X11	non-coaxial	0.8	220	1.03mm	F8	125	<0.05
LS-HF110-07X11	non-coaxial	0.7	110	2.5mm	F6	145	<0.05
LS-HF220-06X11	non-coaxial	0.6	190	1.85mm	F8	125	<0.05
LS-HF110-052X11	non-coaxial	0.52	110	3.5mm	F6	160	<0.05
LS-HF220-05X11	non-coaxial	0.5	220	2.7m	F8	120	<0.05
LS-HF178-04X11	non-coaxial	0.4	178	3.5mm	F6	180	<0.05
LS-HF178-0345X11	non-coaxial	0.345	178	4.2mm	F6	180	<0.05
LS-HF200-03X11	non-coaxial	0.3	200	5.2mm	F6	160	<0.03
LS-HF200-0275X11	non-coaxial	0.275	200	6mm	F6	160	<0.02
LS-HF230-025X11	non-coaxial	0.25	230	6.5mm	F6	160	<0.02
LS-HF200-022X11	non-coaxial	0.22	200	8mm	F5.3	180	<0.016
LS-HF250-02X11	non-coaxial	0.2	250	11mm	F10	160	<0.05
LS-HF230-0172X11	non-coaxial	0.172	230	12mm	F5.6	160	<0.05
LS-HF250-0153X11	non-coaxial	0.153	250	15mm	F5.6	160	<0.05
LS-HF300-013X11	non-coaxial	0.13	300	25mm	F6	160	<0.05
LS-HF320-011X11	non-coaxial	0.11	320	29mm	F7	160	<0.05
LS-HF410-0078X11	non-coaxial	0.078	410	65mm	F7	160	<0.05

More values per model (Optical distortion (%), View distance maximum (mm), View distance 1" (12.8x9.6) (mm), View distance 1.1" (14.2x10.4) (mm), Sensor format, Aperture, Field of view) are on each product page.