

LSTL-H Series



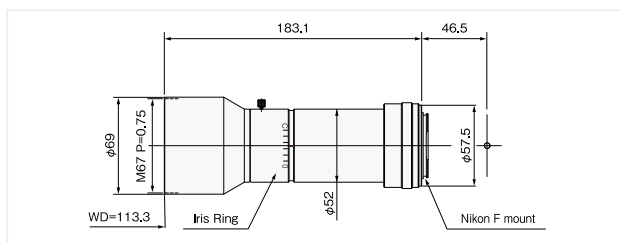
# High Resolution Telecentric Lens for $\phi 44\text{mm}$ Sensor

The highest NA in the optical industry

- Telecentric lens for large format,  $\phi 44\text{mm}$
- Suitable for large area sensor of high resolution, 20 Mega Pixel, 25 Mega Pixel, and 29 Mega Pixel
- Design for large aperture
- Excellent uniformity of brightness and resolution
- Suitable for high speed and precise measurement
- Adjustable iris, possible to adjust depth of field
- M58 and M42 mount are also available

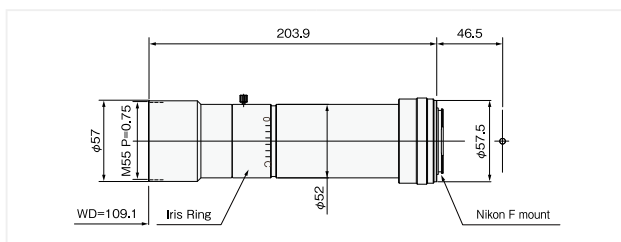


### LSTL10H-F



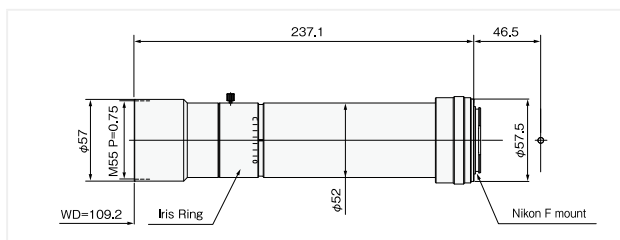
Magnification	1.0x	Resolution	4.3 $\mu$
WD	113mm	Optical distortion	0.01%
Depth of field	0.31mm	Maximum Compatible sensor	$\phi 44\text{mm}$
F No.	6.4	Mount	F

### LSTL15H-F



Magnification	1.5x	Resolution	3.5 $\mu$
WD	109mm	Optical distortion	0.02%
Depth of field	0.17mm	Maximum Compatible sensor	$\phi 44\text{mm}$
F No.	7.8	Mount	F

### LSTL20H-F



Magnification	2.0x	Resolution	2.9 $\mu$
WD	109mm	Optical distortion	-0.02%
Depth of field	0.12mm	Maximum Compatible sensor	$\phi 44\text{mm}$
F No.	8.7	Mount	F

### Model No. for Different Mount

Model	Compatible Camera	Screw Pitch	Back Focal Distance
LSTL□□H-V58	SVS: SVCam-HR	M58 (P = 0.75)	11.48mm
LSTL□□H-B42	Basler	M42 (P = 1)	16mm
LSTL□□H-B42/2	Basler	M42 (P = 0.75)	16mm
LSTL□□H-V42	SVS	M42 (P = 1)	11.48mm
LSTL□□H-S42	Sentech	M42 (P = 1)	10mm
LSTL□□H-D42	Dalsa: Spyder 3	M42 (P = 1)	6.56mm

\* Customized mount is also available. Please contact us for further information.

\* Indicated specifications are design values. \* Resolution indicates the theoretical resolution at wavelength of 550nm.  
\* Depth of field is calculated assuming F No.( $\infty$ ) 5.6 and resolution of 14  $\mu$  camera. \* Drawing is for F mount.

LSTL-TW Series

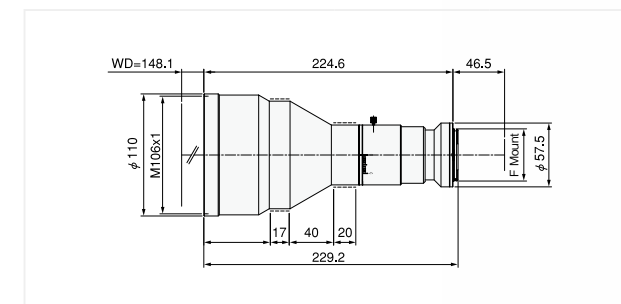


# Telecentric Lens for Large Format

Suitable for middle-sized line and large area sensor

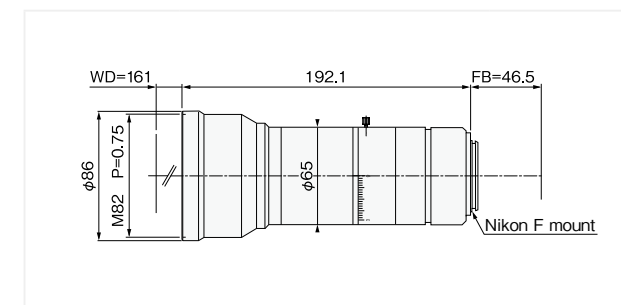
- Low magnification telecentric lens series for large format
- Suitable for 12 Mega Pixel sensor
- LSTL078TW-F is suitable for visible – NIR
- LSTL055TW-F is designed for high NA with long working distance, 160mm
- LSTL03TW-F is designed for long working distance, 150mm that can secure enough space to set up an illumination
- Adjustable iris, possible to adjust depth of field
- Customized mount is available

### LSTL03TW-F



Magnification	0.3x	Depth of field	8.6mm
F No.	9.7	Resolution	22.4 $\mu$
Object side NA	0.015	TV distortion	0.01%
WD	148.1mm	Maximum Compatible sensor	$\phi 28.2\text{mm}$
OI	419.2mm	Mount	F

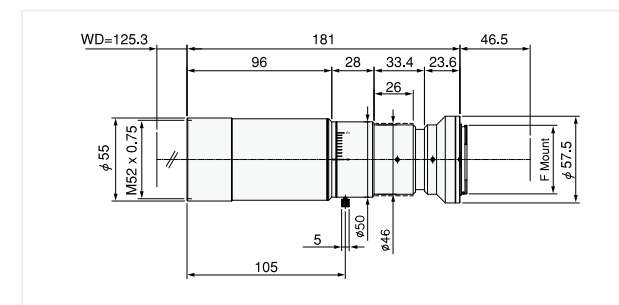
### LSTL055TW-F



Magnification	0.55x	Depth of field	1.37mm
F No.	5.17	Resolution	6.33 $\mu$
Object side NA	0.053	TV distortion	0.021%
WD	161.0mm	Maximum Compatible sensor	$\phi 30.8\text{mm}$
OI	399.6mm	Mount	F

\* Indicated specifications are design values. \* Resolution indicates a theoretical resolution at a wavelength of 550nm.  
\* Depth of field is calculating assuming a horizontal 320 TV resolution using 1/2 inch camera (permissible circle of confusion 40  $\mu$ ).

### LSTL078TW-F



Magnification	0.78x	Depth of field	1.3mm
F No.	9.8	Resolution	8.4 $\mu$
Object side NA	0.04	TV distortion	0.00%
WD	125.3mm	Maximum Compatible sensor	$\phi 28.2\text{mm}$
OI	352.8mm	Mount	F

