

BV-L series Lenses

For 3CCD/3CMOS/4CCD Line Scan Cameras



Common Features

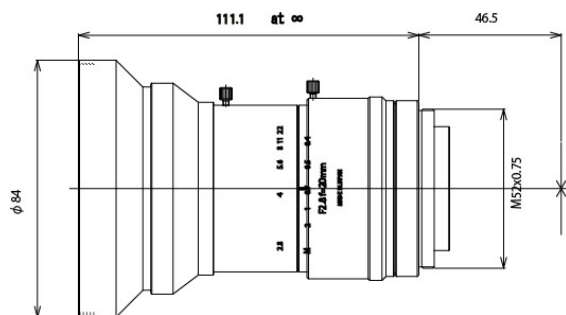
- Designed to be suitable for PRISM based 3CCD/3CMOS/4CCD line scan cameras
- New optics design to improve the longitudinal chromatic aberration (Focal point shift for R,G,B channels) and the lateral chromatic aberration (Image size difference for R,G,B channels) (Common to all lenses)
- Extend the spectral response into Near Infrared Region suitable for JAI LQ series
- High resolution optics design for 7 μm pixel size (4K sensor)
- Marginal light transmission is from 70% to 85% (Depend on model)
- F2.8 maximum aperture for all models
- Applicable for 30 mm length sensors
- 300 mm from the front of the lens for WD (Working Distance)
- M52 mount and F mount are available



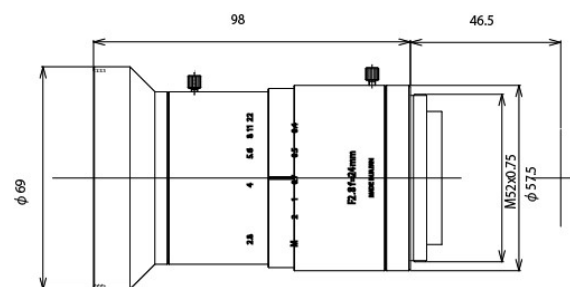
Model Name	BV-L1020	BV-L1024
Image sensor length	30 mm	30 mm
Flange back (in air)	46.5 mm	46.5 mm
Focal length	f=20 mm	f=24 mm
Maximum aperture ratio	F2.8	F2.8
Iris diaphragm range	F2.8 ~ F22	F2.8 ~ F22
Best focusing range (*1)	0.3 m ~ 2.0 m	0.3 m ~ 2.0 m
Minimum object distance (*1)	0.3 m	0.3 m
Angle of view	71.59° @ 2.0 m (at image height 15 mm)	63.89° @ 2.0 m (at image height 15 mm)
Spectral wave length range	400 nm ~ 900 nm	400 nm ~ 900 nm
Marginal brightness	72.4%	70.3%
Exit pupil	-348.54 mm @ 2.0 m (from imaging plane)	-391.68 mm @ 2.0 m (from imaging plane)
Distortion (*2)	0.06% @ 0.5 m (in TV indication)	0.13% @ 2.0 m (in TV indication)
Applicable pixel size	7 μm	7 μm
Filter diameter	M82 x P0.75	M67 x P0.75
Mount	M52 mount, Nikon F mount	M52 mount, Nikon F mount
Weight	660 g	530 g

(*1) Measured from the camera lens mount surface (*2) Specifications are design value.

Note: Fixing for iris and focus by knobs of all the lenses it should be tightened by less than 3cN·m torque.



BV-L1020



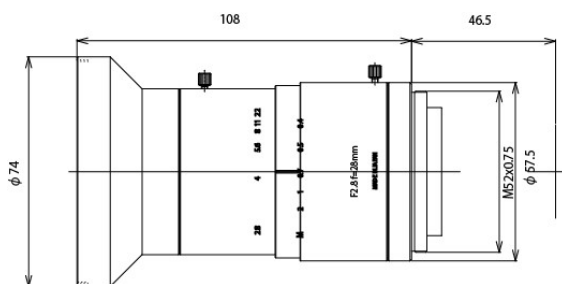
BV-L1024



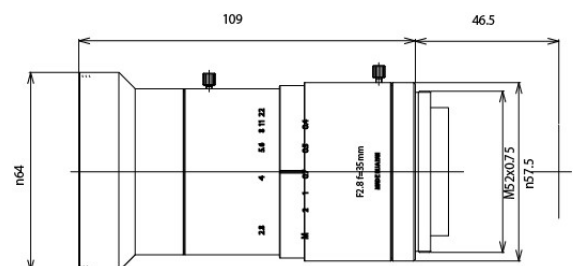
Model Name	BV-L1028	BV-L1035
Image sensor length	30 mm	30 mm
Flange back (in air)	46.5 mm	46.5 mm
Focal length	f=28.0 mm	f=35 mm
Maximum aperture ratio	F2.8	F2.8
Iris diaphragm range	F2.8 ~ F22	F2.8 ~ F22
Best focusing range (*1)	0.3m ~ 2.0m	0.3 m ~ 2.0 m
Minimum object distance (*1)	0.3 m	0.3 m
Angle of view	55.23° @ 2.0 m (at image height 15 mm)	46.22° @ 2.0 m (at image height 15 mm)
Spectral wave length range	400 nm ~ 900 nm	400 nm ~ 900 nm
Marginal brightness	71.7%	78%
Exit pupil	-435.7 mm @ 2.0 m (from imaging plane)	-416.14 mm @ 2.0 m (from imaging plane)
Distortion (*2)	0.19% @ 2.0 m (in TV indication)	0.11% @ 2.0 m (in TV indication)
Applicable pixel size	7 μm	7 μm
Filter diameter	M72 x P0.75	M62 x P0.75
Mount	M52 mount, Nikon F mount	M52 mount, Nikon F mount
Weight	550 g	530 g

(*1) Measured from the camera lens mount surface (*2) Specifications are design value

Note: Fixing for iris and focus by knobs of all the lenses it should be tightened by less than 3cN·m torque.



BV-L1028



BV-L1035

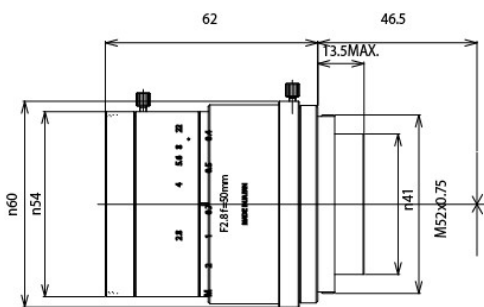
Specifications are subject to change without notice.



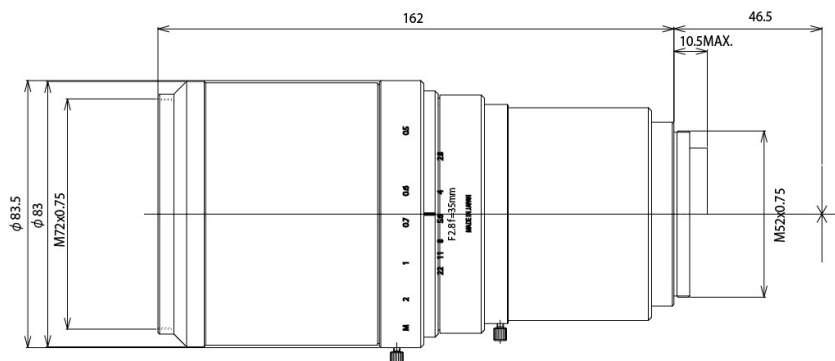
Model Name	BV-L1050	BV-L1105
Image sensor length	30 mm	30 mm
Flange back (in air)	46.5 mm	46.5 mm
Focal length	f=50 mm	f=105 mm
Maximum aperture ratio	F2.8	F2.8
Iris diaphragm range	F2.8 ~ F22	F2.8 ~ F22
Best focusing range (*1)	0.3 m ~ 2.0 m	0.3 ~ 2.0 m
Minimum object distance (*1)	0.3 m	0.3 m
Angle of view	32.09° @ 2.0 m (at image height 15 mm)	15.84° @ 2.0 m (at image height 15 mm)
Spectral wave length range	400 nm ~ 900 nm	400 nm ~ 900 nm
Marginal brightness	85.3%	84.3%
Exit pupil	-348.94 mm @ 2.0 m (from imaging plane)	-186.69 mm @ 2.0 m (from imaging plane)
Distortion (*2)	0.02% @ 2.0 m (in TV indication)	0.004% ~ 0.12% (in TV indication) (0.5 m ~ 2.0 m)
Applicable pixel size	7 μm	7 μm
Filter diameter	M52 x P0.75	M72 x P0.75
Mount	M52 mount, Nikon F mount	M52 mount, Nikon F mount
Weight	305 g	1085 g

(*1) Measured from the camera lens mount surface (*2) Specifications are design value

Note: Fixing for iris and focus by knobs of all the lenses it should be tightened by less than 3cN·m torque.



BV-L1050



BV-L1105