

BV-L series lenses

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



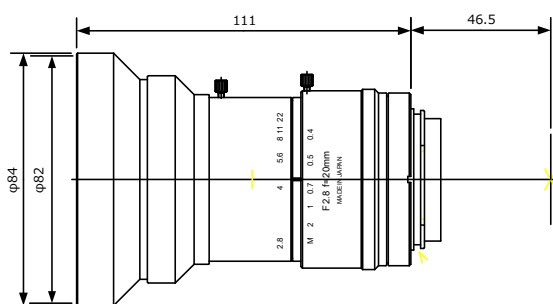
Common Features

- 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 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 30mm length sensors
- 300mm from the front of the lens for WD (Working Distance)
- M52 mount and F mount are available

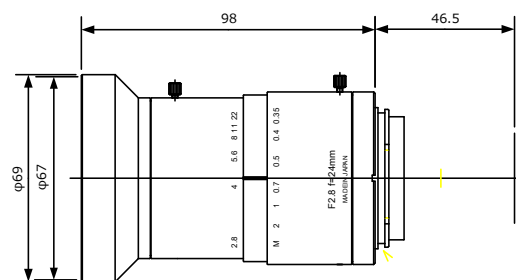


Model Name	BV-L1020	BV-L1024
Image sensor length	30 mm	30 mm
Flange back (in air)	46.5 mm	46.5 mm
Focal length	f=20 mm	f=24 mm
Maximum aperture ratio	F2.8	F2.8
Iris diaphragm range	F2.8 ~ F22	F2.8 ~ F22
Best focusing range (*1)	0.4m ~ 2.0m	0.3 m ~ 2.0m
Minimum object distance (*1)	0.4 m	0.3 m
Angle of view	71.59°@2.0M (at Image height 15mm)	63.89°@2.0m (at image height 15mm)
Spectral wave length range	400nm ~ 900nm	400nm ~ 900nm
Marginal brightness	72.4%	70.3%
Exit pupil	-348.54mm @2.0M (from imaging plane)	-391.68 mm @2.0m (from imaging plane)
Distortion	0.45% @ 2.0M (in TV indication)	0.13% @ 2.0M (in TV indication)
Applicable pixel size	7 μm	7 μm
Filter diameter	M82 x P 0.75	M67 x P0.75
Mount	M52 mount, Nikon F mount	M52 mount, Nikon F mount
Weight	660g	530g

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



BV-L1020-F

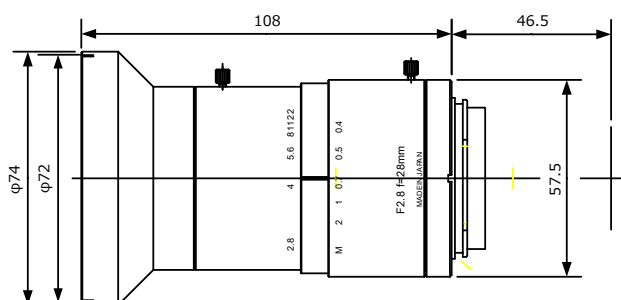


BV-L1024-F

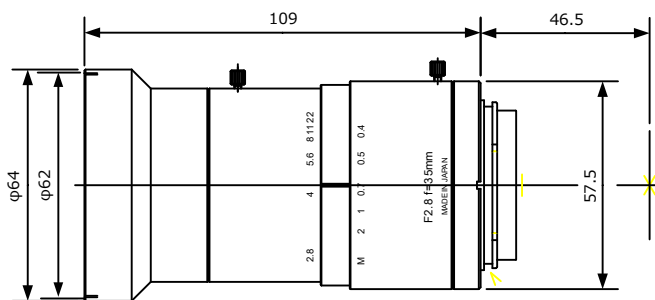


Model Name	BV-L1028	BV-L1035
Image sensor length	30 mm	30 mm
Flange back (in air)	46.5 mm	46.5 mm
Focal length	f=28.0 mm	f=35 mm
Maximum aperture ratio	F2.8	F2.8
Iris diaphragm range	F2.8 ~ F22	F2.8 ~ F22
Best focusing range (*1)	0.4m ~ 2.0m	0.3 m ~ 2.0 m
Minimum object distance (*1)	0.4 m	0.3 m
Angle of view	55.23°@2.0M (at Image height 15mm)	46.22°@2.0M (Image height 15mm)
Spectral wave length range	400nm ~ 900nm	400nm ~ 900nm
Marginal brightness	71.7%	78%
Exit pupil	-435.7 mm @2.0M (from imaging plane)	-416.14 mm @2.0M (from imaging plane)
Distortion (*2)	0.19% @ 2.0M (in TV indication)	0.11% @ 2.0M (in TV indication)
Applicable pixel size	7 μm	7 μm
Filter diameter	M72x P 0.75	M62x P 0.75
Mount	M52 mount, Nikon F mount	M52 mount, Nikon F mount
Weight	550g	530g

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



BV-L1028-F

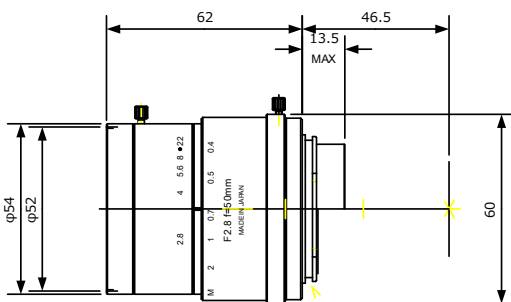


BV-L1035-F

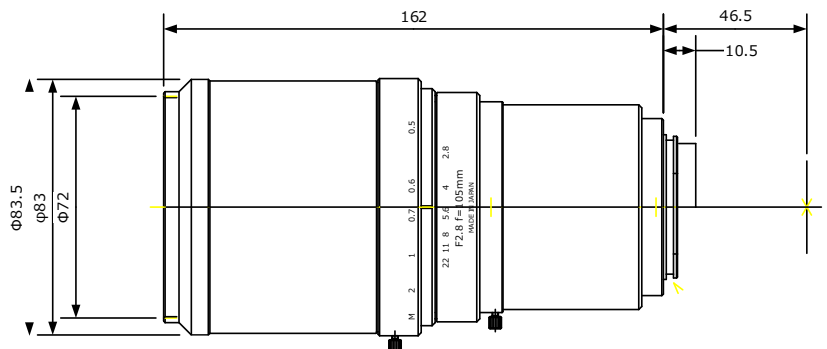


Model Name	BV-L1050	BV-L1105
Image sensor length	30 mm	30 mm
Flange back (in air)	46.5 mm	46.5 mm
Focal length	f=50 mm	f=105 mm
Maximum aperture ratio	F2.8	F2.8
Iris diaphragm range	F2.8 ~ F22	F2.8 ~ F22
Best focusing range (*1)	0.4m ~ 2.0m	0.5 ~ 2.0m
Minimum object distance (*1)	0.4 m	0.47m
Angle of view	32.09°@2.0M (Image height 15mm)	15.84° (Image height 15mm, at 2m)
Spectral wave length range	400nm ~ 900nm	400nm ~ 900nm
Marginal brightness	85.3%	84.3%
Exit pupil	-348.94 mm @2.0M (from imaging plane)	-186.69 mm (from imaging plane)
Distortion (*2)	0.02% @ 2.0M (in TV indication)	0.004% ~ 0.12% (TV indication)
Applicable pixel size	7 μm	7 μm
Filter diameter	M52x P 0.75	M72 x P0.75
Mount	M52 mount, Nikon F mount	M52Mount, Nikon F Mount
Weight	305g	1085g

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



BV-L1050-F



BV-L1105-F