



LENSES FOR JAI CAMERAS

BRING FOCUS TO YOUR VISION SYSTEM
WITH JAI'S LENS COLLECTION

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Lenses for JAI Cameras

JAI provides a collection of lenses pre-qualified for use with various JAI cameras. The collection is divided into three separate series tailored to the sensor formats, pixel sizes, and other camera specifications critical to maximizing optical performance for specific JAI camera models.



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Compact C-mount lens series

JAI's compact C-mount lenses are designed to deliver an exceptional combination of performance and price when combined with the state-of-the-art sensors found in JAI's Go-X Series of compact machine vision cameras.

The selection of over 40 lenses includes fixed-focal lengths from 4 mm to 75 mm depending on the sensor format, with C-mounts and locking screws on focus and iris settings to ensure reliable operation in typical factory environments.

The lenses are also suitable for Go Series and Spark Series cameras with up to 12-megapixel resolutions.



Group 1

Recommended for:



GOX-2402
(Go-X Series)

Lens Model	Lens Mount	Focal Length	Image Format	Aperture	Working Distance [mm]	TV Distortion [%]	Lens Dimensions Diameter x Length [mm]
JCH-C118-0420C	C-mount	4 mm	1/1.8" (ø 9 mm)	F2 ~ F11/C	100 - Inf.	0,50 %	ø38,2 x 31,9
JCH-C118-0620C	C-mount	6 mm	1/1.8" (ø 9 mm)	F2 ~ F11/C	100 - Inf.	0,10 %	ø27 x 27,5
JCH-C118-0820C	C-mount	8 mm	1/1.8" (ø 9 mm)	F2 ~ F11/C	100 - Inf.	0,10 %	ø27 x 29
JCH-C118-1220C	C-mount	12 mm	1/1.8" (ø 9 mm)	F2 ~ F11/C	100 - Inf.	0,30 %	ø27 x 23
JCH-C118-1620C	C-mount	16 mm	1/1.8" (ø 9 mm)	F2 ~ F11/C	100 - Inf.	0,10 %	ø27,2 x 26,4
JCH-C118-2520C	C-mount	25 mm	1/1.8" (ø 9 mm)	F2 ~ F11/C	100 - Inf.	0,10 %	ø28 x 27,5
JCH-C118-3520C	C-mount	35 mm	1/1.8" (ø 9 mm)	F2 ~ F11/C	200 - Inf.	0,10 %	ø28 x 37

Compact C-mount lens series – continued

Group 2

Recommended for:



GOX-3200
(Go-X Series)



GOX-3201
(Go-X Series)



GOX-5105
(Go-X Series)

Lens Model	Lens Mount	Focal Length	Image Format	Aperture	Working Distance [mm]	TV Distortion [%]	Lens Dimensions Diameter x Length [mm]
JCH-C118-0420C	C-mount	4 mm	1/1.8" (ø 9 mm)	F2 ~ F11/C	100 - Inf.	0,50 %	ø38,2 x 31,9
JCH-C118-0620C	C-mount	6 mm	1/1.8" (ø 9 mm)	F2 ~ F11/C	100 - Inf.	0,10 %	ø27 x 27,5
JCH-C118-0820C	C-mount	8 mm	1/1.8" (ø 9 mm)	F2 ~ F11/C	100 - Inf.	0,10 %	ø27 x 29
JCH-C118-1220C	C-mount	12 mm	1/1.8" (ø 9 mm)	F2 ~ F11/C	100 - Inf.	0,30 %	ø27 x 23
JCH-C118-1620C	C-mount	16 mm	1/1.8" (ø 9 mm)	F2 ~ F11/C	100 - Inf.	0,10 %	ø27,2 x 26,4
JCH-C118-2520C	C-mount	25 mm	1/1.8" (ø 9 mm)	F2 ~ F11/C	100 - Inf.	0,10 %	ø28 x 27,5
JCH-C118-3520C	C-mount	35 mm	1/1.8" (ø 9 mm)	F2 ~ F11/C	200 - Inf.	0,10 %	ø28 x 37

Compact C-mount lens series - continued

Group 3

Recommended for:



GOX-5102
(Go-X Series)



GOX-5103
(Go-X Series)



GO-5100
(Go Series)



GO-5101
(Go Series)

Lens Model	Lens Mount	Focal Length	Image Format	Aperture	Working Distance [mm]	TV Distortion [%]	Lens Dimensions Diameter x Length [mm]
JCH-C23-0828D	C-mount	8 mm	2/3" (ø 11 mm)	F2.8 ~ F16	100 - Inf.	1,00 %	ø39,3 x 44
JCH-C23-1228D	C-mount	12 mm	2/3" (ø 11 mm)	F2.8 ~ F16	100 - Inf.	-0,01 %	ø32,9 x 40,5
JCH-C23-1628D	C-mount	16 mm	2/3" (ø 11 mm)	F2.8 ~ F16	100 - Inf.	0,10 %	ø33,5 x 37,9
JCH-C23-2528D	C-mount	25 mm	2/3" (ø 11 mm)	F2.8 ~ F16	100 - Inf.	0,20 %	ø33,5 x 40,33
JCH-C23-3528D	C-mount	35 mm	2/3" (ø 11 mm)	F2.8 ~ F16	200 - Inf.	-0,01 %	ø39,8 x 47,7
JCH-C23-5028D	C-mount	50 mm	2/3" (ø 11 mm)	F2.8 ~ F16	300 - Inf.	-0,01 %	ø39,6 x 61

Compact C-mount lens series - continued

Group 4

Recommended for:



GOX-8901
(Go-X Series)



GO-2400
(Go Series)



GO-2401
(Go Series)



GO-5000
(Go Series)



SP-5000
(Spark Series)



SW-2005
(Sweep Series)

Lens Model	Lens Mount	Focal Length	Image Format	Aperture	Working Distance [mm]	TV Distortion [%]	Lens Dimensions Diameter x Length [mm]
JCH-C1-1214A	C-mount	12 mm	1" (ø 16 mm)	F1.4 ~ F16	100 - Inf.	0,02 %	ø50 x 61,6
JCH-C1-1614A	C-mount	16 mm	1" (ø 16 mm)	F1.4 ~ F16	100 - Inf.	0,00 %	ø50 x 62,2
JCH-C1-2514A	C-mount	25 mm	1" (ø 16 mm)	F1.4 ~ F16	100 - Inf.	0,00 %	ø44,8 x 51,7
JCH-C1-3514A	C-mount	35 mm	1" (ø 16 mm)	F1.4 ~ F16	150 - Inf.	0,00 %	ø52 x 57
JCH-C1-5014A	C-mount	50 mm	1" (ø 16 mm)	F1.4 ~ F16	300 - Inf.	0,00 %	ø52 x 59,3
JCH-C1-7518A	C-mount	75 mm	1" (ø 16 mm)	F1.8 ~ F16	800 - Inf.	0,00 %	ø60 x 94,6

Compact C-mount lens series - continued

Group 5

Recommended for:



GOX-12401
(Go-X Series)



GOX-12409
(Go-X Series)



SP-12400
(Spark Series)



SP-12401
(Spark Series)



SW-4005
(Sweep Series)

Lens Model	Lens Mount	Focal Length	Image Format	Aperture	Working Distance [mm]	TV Distortion [%]	Lens Dimensions Diameter x Length [mm]
JCH-C11-0618A	C-mount	6 mm	1.1" (ø 17.6 mm)	F1.8 ~ F16	100 - Inf.	2,50 %	ø66 x 81,8
JMO-C11-0817SR	C-mount	8 mm	1.1" (ø 17.6 mm)	F1.7 ~ F16	100 - Inf.	-1,90 %	ø58 x 77
JCH-C11-0814A	C-mount	8 mm	1.1" (ø 17.6 mm)	F1.8 ~ F16	100 - Inf.	5,50 %	ø60 x 81,8
JMO-C11-1217SR	C-mount	12 mm	1.1" (ø 17.6 mm)	F1.7 ~ F16	100 - Inf.	-2,00 %	ø39,5 x 66
JCH-C11-1228A	C-mount	12 mm	1.1" (ø 17.6 mm)	F2.8 ~ F22	100 - Inf.	1,50 %	ø48 x 17,8
JMO-C11-1615SR	C-mount	16 mm	1.1" (ø 17.6 mm)	F1.5 ~ F16	100 - Inf.	-0,86 %	ø39,5 x 67
JCH-C11-1628A	C-mount	16 mm	1.1" (ø 17.6 mm)	F2.8 ~ F22	100 - Inf.	0,50 %	ø38 x 82
JMO-C11-2515SR	C-mount	25 mm	1.1" (ø 17.6 mm)	F1.5 ~ F16	100 - Inf.	-0,74 %	ø42 x 67
JCH-C11-2528A	C-mount	25 mm	1.1" (ø 17.6 mm)	F2.8 ~ F22	100 - Inf.	0,10 %	ø37 x 86
JMO-C11-3518SR	C-mount	35 mm	1.1" (ø 17.6 mm)	F1.8 ~ F16	200 - Inf.	-0,09 %	ø54,5 x 46
JCH-C11-3528A	C-mount	35 mm	1.1" (ø 17.6 mm)	F2.8 ~ F22	150 - Inf.	0,02 %	ø38 x 47,6
JMO-C11-5022SR	C-mount	50 mm	1.1" (ø 17.6 mm)	F2.2 ~ F16	300 - Inf.	0,01 %	ø39,5 x 58,5
JCH-C11-5028A	C-mount	50 mm	1.1" (ø 17.6 mm)	F2.8 ~ F22	300 - Inf.	0,04 %	ø38 x 57,88

High performance, high resolution lens series

High resolution cameras require high performance lenses capable of delivering sharp contrast even in applications requiring resolving power of 200 lp/mm and above.

JAI's selection of high performance, high resolution lenses ensures that you can leverage the small pixel sizes and high level of detail afforded by JAI's Spark Series 26-megapixel high resolution cameras while maintaining maximum image quality.

Can also be used with selected Spark Series 12-megapixel and 5-megapixel camera models, as well as the 8.1, 12.4, 16.2, 20.3, and 24.5-megapixel Go-X Series Pregius S models.



Recommended for:



GOX-6409
(Go-X Series)



GOX-8105
(Go-X Series)



GOX-12405
(Go-X Series)



GOX-16205
(Go-X Series)



GOX-20409
(Go-X Series)



GOX-20405
(Go-X Series)



GOX-24505
(Go-X Series)



SP-5000
(Spark Series)



SP-12400
(Spark Series)



SP-12401
(Spark Series)



SP-25000
(Spark Series)

Lens Model	Lens Mount	Focal Length	Image Format	Aperture	Working Distance [mm]	TV Distortion [%]	Lens Dimensions Diameter x Length [mm]
JCH-C43-1228A	C-mount	12 mm	4/3" (ø 22 mm)	F2.8 ~ F22	100 - Inf.	2,00 %	ø48 x 81,8
JCH-C43-1628A	C-mount	16 mm	4/3" (ø 22 mm)	F2.8 ~ F22	100 - Inf.	1,00 %	ø38 x 82
JMO-C11-2518XR	C-mount	25 mm	1.2" (ø 19.3 mm)	F1.8 ~ F16	70 - 400	-0,09 %	ø38 x 57,2
JCH-C43-2528A	C-mount	25 mm	4/3" (ø 22 mm)	F2.8 ~ F22	100 - Inf.	0,30 %	ø37 x 86
JMO-C11-3518XR	C-mount	35 mm	1.2" (ø 19.3 mm)	F1.8 ~ F16	150 - 600	0,07 %	ø35 x 49,51
JCH-C43-3528A	C-mount	35 mm	4/3" (ø 22 mm)	F2.8 ~ F22	200 - Inf.	0,04 %	ø38 x 51,6
JMO-C11-5020XR	C-mount	50 mm	1.2" (ø 19.3 mm)	F2 ~ F16	180 - 600	-0,05 %	ø79,8 x 40
JCH-C43-5028A	C-mount	50 mm	4/3" (ø 22 mm)	F2.8 ~ F22	300 - Inf.	0,10 %	ø38 x 57,9
JMO-C11-9028XR	C-mount	90 mm	1.2" (ø 19.3 mm)	F2.8 ~ F16	330 - 400	0,03 %	ø105,8 x 40

Prism-optimized lens series

JAI's prism-optimized lenses feature special designs to compensate for the different optical paths and focusing characteristics of a multi-waveband camera so that you can reap the full benefits of the prism technology.

Whether you need the precise color differentiation of JAI's Apex and Apex Medical/Life Sciences Series, or the multispectral capabilities of JAI's Fusion Series, Sweep+ Series and Flex-Eye cameras, JAI's line of prism-optimized lenses deliver the sharp, high quality images you rely on from your prism-based camera



Optimized for:



AP-5100T
(Apex Series)



AP-3200T
(Apex Series)



AP-1600T
(Apex Series)



AP-3200T-LS
(Apex Life Sciences)



AP-3200T-LSX
(Apex Life Sciences)



AP-1600T-LSX
(Apex Life Sciences)



FS-3200D
FS-3200T
(Fusion Series)



FS-1600D
FS-1600T
(Fusion Series)



FSFE-3200D
FSFE-3200T
(Fusion Flex-Eye)



FSFE-1600D
FSFE-1600T
(Fusion Flex-Eye)

Lens Model	Lens Mount	Focal Length	Image Format	Aperture	Working Distance [mm]	TV Distortion [%]	Lens Dimensions Diameter x Length [mm]
JVS-C118-0628-C3	C-Mount	6 mm	1/1.8" (ø 9 mm)	F2.8 ~ F16/C	100 - Inf.	-0,68 %	ø38 x 60
JMO-C118-0730-C3	C-Mount	7 mm	1/1.8" (ø 9 mm)	F3 ~ F16	500 - Inf.	1,8 %	ø29,5 x 50,7
JVS-C118-0824-C3	C-Mount	8 mm	1/1.8" (ø 9 mm)	F2.4 ~ F16/C	100- Inf.	-0,86 %	ø37 x 58
JMO-C118-0930-C3	C-Mount	9.3 mm	1/1.8" (ø 9 mm)	F3 ~ F16	150- Inf.	1,3 %	ø29,5 x 42
JVS-C118-1218-C3	C-Mount	12 mm	1/1.8" (ø 9 mm)	F1.8 ~ F16/C	150- Inf.	-0,8 %	ø32 x 56
JMO-C118-1430-C3	C-Mount	14 mm	1/1.8" (ø 9 mm)	F3 ~ F16	235- Inf.	0,67 %	ø29,5 x 43
JVS-C118-1618-C3	C-Mount	16 mm	1/1.8" (ø 9 mm)	F1.8 ~ F16/C	150- Inf.	-0,63 %	ø36 x 56

Note:

JVS lenses are compatible with all Apex Series and Fusion Series models.
JMO lenses are not compatible with the Apex AP-5100T models.

Prism-optimized lens series - continued (Lenses for line scan cameras)

Optimized for:



SW-4010Q-MCL
(Sweep+ Series)

Lens Model	Lens Mount	Focal Length	Image Format	Aperture	Working Distance [mm]	TV Distortion [%]	Lens Dimensions Diameter x Length [mm]
JMO-M5231-2828-C4	M-52 mount	28 mm	30,72 mm 25,6 mm	F2.8 - F16	510 (ideal)	-0.8 %	ø95 x 133,5

Lenses for other JAI line scan cameras

If you need lenses for other line scan camera models in the Sweep+ Series, Sweep Series and Wave Series, please contact JAI to discuss your needs.



