

# Factory Automation Lens Options

## AND90169/D

### INTRODUCTION

The following application note includes a list of lenses that are suitable for the listed image sensors from **onsemi**. Table 1 is a list of lenses that have been tested by **onsemi**. Table 2 is a list of lenses (or lens series) that, according to the characteristics, will work with the product, but haven't been directly tested by **onsemi**. Table 3 contains contact details of the lens producers or distributors of the models mentioned in Tables 1 and 2. This information is provided as a general guide line for lens use in a general Factory Automation application; we recommend the user to perform his own evaluation to determine which lens is suitable for the application.

### LENS LIST

Image sensors: XGS 5000, XGS 3000 and XGS2000, Optical format 2/3'

Table 1. TESTED LENSES

Lens Maker	Part Number	Link
FUJIFILM	CF8ZA-1S	<a href="https://www.fujifilm.com/us/en/business/optical-devices/machine-vision-lens/cf-za-1s-series#anc01">https://www.fujifilm.com/us/en/business/optical-devices/machine-vision-lens/cf-za-1s-series#anc01</a>
	CF16ZA-1S	<a href="https://www.fujifilm.com/us/en/business/optical-devices/machine-vision-lens/cf-za-1s-series#anc02">https://www.fujifilm.com/us/en/business/optical-devices/machine-vision-lens/cf-za-1s-series#anc02</a>
	CF35ZA-1S	<a href="https://www.fujifilm.com/us/en/business/optical-devices/machine-vision-lens/cf-za-1s-series#anc03">https://www.fujifilm.com/us/en/business/optical-devices/machine-vision-lens/cf-za-1s-series#anc03</a>
	HF3520-12M	<a href="https://www.fujifilm.com/us/en/business/optical-devices/machine-vision-lens/hf-12m-series#model03">https://www.fujifilm.com/us/en/business/optical-devices/machine-vision-lens/hf-12m-series#model03</a>
	HF50-XA-5M	<a href="https://www.fujifilm.com/uk/en/business/optical-devices/mvlens/hfxa5m#HF04">https://www.fujifilm.com/uk/en/business/optical-devices/mvlens/hfxa5m#HF04</a>
KOWA	LM8FC24M	<a href="https://www.kowa-lenses.com/en/lm8fc24m-24mp-industrial-lens-c-mount?number=12186">https://www.kowa-lenses.com/en/lm8fc24m-24mp-industrial-lens-c-mount?number=12186</a>
	LM12FC24M	<a href="https://www.kowa-lenses.com/en/lm12fc24m-24mp-industrial-lens-c-mount">https://www.kowa-lenses.com/en/lm12fc24m-24mp-industrial-lens-c-mount</a>
	LM35FC24M	<a href="https://www.kowa-lenses.com/en/lm35fc24m-24mp-industrial-lens-c-mount">https://www.kowa-lenses.com/en/lm35fc24m-24mp-industrial-lens-c-mount</a>
	LM12XC	<a href="https://www.kowa-lenses.com/en/lm12xc-20mp-industrial-lens-c-mount?number=10998">https://www.kowa-lenses.com/en/lm12xc-20mp-industrial-lens-c-mount?number=10998</a>
VST	VS-H1218-IRC/11	<a href="https://vst.co.jp/en/machine-vision-lenses-en/vs-h-irc-series/">https://vst.co.jp/en/machine-vision-lenses-en/vs-h-irc-series/</a>
MYUTRON	HF3514V-2	<a href="https://www.myutron.com/en/lens/fa/hf/">https://www.myutron.com/en/lens/fa/hf/</a>
	HF2514V-2	
	HF1618V-2	

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**Table 2. RECOMMENDED LENSES (not tested at onsemi)**

Lens Maker	Series or Part Number	Link
SCHNEIDER KREUZNACH	SYLVINE (Series)	<a href="https://schneiderkreuznach.com/en/industrial-optics/products/lenes/sylvine">https://schneiderkreuznach.com/en/industrial-optics/products/lenes/sylvine</a>
	AQUAMARINE (Series)	<a href="https://schneiderkreuznach.com/en/industrial-optics/products/lenes/aquamarine">https://schneiderkreuznach.com/en/industrial-optics/products/lenes/aquamarine</a>
	BERYL (Series)	<a href="https://schneiderkreuznach.com/en/industrial-optics/products/lenes/beryl">https://schneiderkreuznach.com/en/industrial-optics/products/lenes/beryl</a>
	EMERALD (Series)	<a href="https://schneiderkreuznach.com/en/industrial-optics/products/lenes/emerald">https://schneiderkreuznach.com/en/industrial-optics/products/lenes/emerald</a>
	JADE (Series)	<a href="https://schneiderkreuznach.com/en/industrial-optics/products/lenes/jade">https://schneiderkreuznach.com/en/industrial-optics/products/lenes/jade</a>
	OPAL 2.8/12 C	<a href="https://schneiderkreuznach.com/en/industrial-optics/products/lenes/opal">https://schneiderkreuznach.com/en/industrial-optics/products/lenes/opal</a>
	PYRITE (Series)	<a href="https://schneiderkreuznach.com/en/industrial-optics/products/lenes/pyrit">https://schneiderkreuznach.com/en/industrial-optics/products/lenes/pyrit</a>
	TOURMALINE (Series)	<a href="https://schneiderkreuznach.com/en/industrial-optics/products/lenes/tourmaline">https://schneiderkreuznach.com/en/industrial-optics/products/lenes/tourmaline</a>
	TOPAZ (Series)	<a href="https://schneiderkreuznach.com/en/industrial-optics/products/lenes/topaz">https://schneiderkreuznach.com/en/industrial-optics/products/lenes/topaz</a>
CARL ZEISS AG	DIMENSION (Series)	<a href="https://www.zeiss.com/consumer-products/int/industrial-lenses/dimension-lenses.html">https://www.zeiss.com/consumer-products/int/industrial-lenses/dimension-lenses.html</a>
COMPUTAR	MPW 3 (Series)	<a href="https://computar.com/product_series/91/MPW3%20Machine%20Vision%20Lens%20Series">https://computar.com/product_series/91/MPW3%20Machine%20Vision%20Lens%20Series</a>
TAMRON	M117FM-RG (Series)	<a href="https://www.tamron.vision/lenses/m117fm-rg-series/">https://www.tamron.vision/lenses/m117fm-rg-series/</a>
	MA23F (Series)	<a href="https://www.tamron.vision/lenses/ma23f-series/">https://www.tamron.vision/lenses/ma23f-series/</a>
APPLETECH	AP-E3420A	<a href="https://appletec.com/">https://appletec.com/</a>
KOWA	JC10M (Series)	<a href="https://lenses.kowa-usa.com/27-10MP-JC10M-Series">https://lenses.kowa-usa.com/27-10MP-JC10M-Series</a>
	JC5M2 (Series)	<a href="https://lenses.kowa-usa.com/28-5MP-Plus-JC5M2-Series">https://lenses.kowa-usa.com/28-5MP-Plus-JC5M2-Series</a>
	JC5MC (Series)	<a href="https://lenses.kowa-usa.com/66-jc5mc-compact-series">https://lenses.kowa-usa.com/66-jc5mc-compact-series</a>
	JC1MS (Series)	<a href="https://www.kowa-lenses.com/en/lm12jc1ms-2mp-industrial-lens-c-mount">https://www.kowa-lenses.com/en/lm12jc1ms-2mp-industrial-lens-c-mount</a>
	JC (Series)	<a href="https://lenses.kowa-usa.com/32-JC-Series">https://lenses.kowa-usa.com/32-JC-Series</a>

**Table 3. DISTRIBUTORS AND PRODUCERS**

Lens Maker	Distributors
CARL ZEISS AG	<a href="https://www.zeiss.com/consumer-products/int/industrial-lenses/content/distribution-partners.html">https://www.zeiss.com/consumer-products/int/industrial-lenses/content/distribution-partners.html</a>
FUJIFILM	Contact <a href="mailto:cctv_eu@fujifilm.com">cctv_eu@fujifilm.com</a> or +4928217115400
SCHNEIDER KREUZNACH	<a href="https://schneiderkreuznach.com/en/company/contact/contact-form">https://schneiderkreuznach.com/en/company/contact/contact-form</a>
KOWA	<a href="https://www.kowa-lenses.com/en/">https://www.kowa-lenses.com/en/</a>
VST	<a href="https://vst.co.jp/en/company/branches/">https://vst.co.jp/en/company/branches/</a>
MYUTRON	<a href="https://www.myutron.com/en/inquiry/">https://www.myutron.com/en/inquiry/</a>
COMPUTAR	VISION LIGHT TECH <a href="https://www.visionlighttech.com/contact.php">https://www.visionlighttech.com/contact.php</a>
TAMRON	
FUJIFILM	
APPLETEC	<a href="https://www.arrow.com/en">https://www.arrow.com/en</a>

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