



## Factory Automation Lens Options

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### INTRODUCTION

The following application note includes a list of lenses that has been found working well with the listed image sensors from ON Semiconductor. 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.

### APPLICATION NOTE

### LENS LIST

Image sensor: XGS 12000, Optical format 1'

#### Tested Lenses


Lens Maker	Part Number	FL (mm)	Measured Parameter		
			MTF (cy/mm)	Veiling Glare (%)	Max Optical Distortion (%)
Fujinon	HF1288_12M	12	130	1.2	4.107
Fujinon	HF3520_12M	35	130	0.86	-0.844
Fujinon	HF50-XA-5M	50	136	0.95	-0.603
Fujinon	CF35-ZA-1S	35	140	1.0	4 (Note 1)
Fujinon	CF16-ZA-1S	16	140	1.0	-9.4 (Note 1)
Kowa	LM12FC	12	144	2.26	-3.851
Kowa	LM35FC	35	124	2.13	0.963

NOTE: **MTF**: 20% signal drop at the center of the image, f/#:4

**Veiling Glare**: a sort of contrast measure, the lower the better

**Distortion**: is computed as the ratio of the error in the radial distance of an image point from the ideal position in percent

1. Equivalent to geometric distortion.

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