

# FUJINON. Your total solution to machine vision.

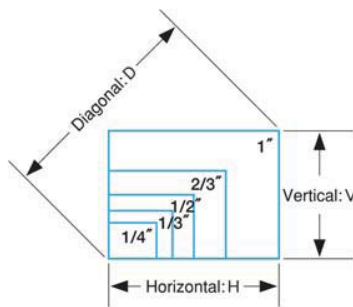


Fujinon offers a variety of 5 megapixel ultra high resolution and inexpensive 1.5 megapixel resolution fixed focal lenses, providing the flexibility needed for today's machine vision applications. All lenses incorporate locking screws to keep focus and aperture consistent when subjected to vibration.

All of our Vision Lens Series feature Megapixel Capability, Metal Barrel, Locking Screws, Close M.O.D, and Standard C-mount.

## Image Sizes

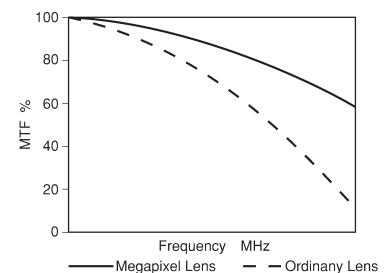
There are several types of imaging elements for cameras, with different image sizes. The typical aspect ratio of cameras is normally 4:3 (H:V).



Imaging element	Image size (mm)		
	Horizontal:H	Vertical:V	Diagonal:D
1"	12.8	9.6	16.0
2/3"	8.8	6.6	11.0
1/2"	6.4	4.8	8.0
1/3"	4.8	3.6	6.0
1/4"	3.6	2.7	4.5

## Fixed focal length lens corresponding to megapixel

The chart shown at right compares MTF of an ordinary lens and a megapixel corresponding lens. As the frequency increases, the disparity in MTF becomes bigger.



Model Number	Image Format	Focal Length	Iris Range	Iris Operation	Lens Mount	M.O.D. (M)
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## 2/3" FORMAT, 5 MEGAPIXEL MACHINE VISION LENS SERIES

5 Megapixel	HF12.5SA-1	2/3"	12.5mm	F1.4 - F22	Manual	C	0.1
5 Megapixel	HF16SA-1	2/3"	16mm	F1.4 - F22	Manual	C	0.1
5 Megapixel	HF25SA-1	2/3"	25mm	F1.4 - F22	Manual	C	0.1
5 Megapixel	HF35SA-1	2/3"	35mm	F1.4 - F22	Manual	C	0.2
5 Megapixel	HF50SA-1	2/3"	50mm	F1.8 - F22	Manual	C	0.4
5 Megapixel	HF75SA-1	2/3"	75mm	F1.8 - F22	Manual	C	0.9

## 1" FORMAT, 1.5 MEGAPIXEL MACHINE VISION LENS SERIES

1.5 Megapixel	CF12.5HA-1	1"	12.5mm	F1.4 - F22	Manual	C	0.1
1.5 Megapixel	CF16HA-1	1"	16mm	F1.4 - F22	Manual	C	0.1
1.5 Megapixel	CF25HA-1	1"	25mm	F1.4 - F22	Manual	C	0.1
1.5 Megapixel	CF35HA-1	1"	35mm	F1.4 - F22	Manual	C	0.2
1.5 Megapixel	CF50HA-1	1"	50mm	F1.8 - F22	Manual	C	0.4
1.5 Megapixel	CF75HA-1	1"	75mm	F1.8 - F22	Manual	C	0.9

## ECONOMICAL 1.5 MEGAPIXEL MACHINE VISION LENS SERIES

1.5 Megapixel	DF6HA-1B	1/2"	6mm	F1.2 - F16	Manual	C	0.1
1.5 Megapixel	HF9HA-1B	2/3"	9mm	F1.4 - F16	Manual	C	0.1
1.5 Megapixel	HF12.5HA-1B	2/3"	12.5mm	F1.4 - F16	Manual	C	0.1
1.5 Megapixel	HF16HA-1B	2/3"	16mm	F1.4 - F16	Manual	C	0.1
1.5 Megapixel	HF25HA-1B	2/3"	25mm	F1.4 - F16	Manual	C	0.1
1.5 Megapixel	HF35HA-1B	2/3"	35mm	F1.6 - F22	Manual	C	0.3
1.5 Megapixel	HF50HA-1B	2/3"	50mm	F2.3 - F22	Manual	C	0.5
1.5 Megapixel	HF75HA-1B	2/3"	75mm	F2.8 - F22	Manual	C	1.1

## 3CCD POV LENS SERIES

3CCD	TF2.8DA-8	1/3"	2.8mm	F2.2 - F1.6 - C	Manual	C	0.1
3CCD	TF4DA-8	1/3"	4mm	F2.2 - F1.6 - C	Manual	C	0.1
3CCD	TF8DA-8B	1/3"	8mm	F2.2 - F1.6 - C	Manual	C	0.1
3CCD	TF15DA-8	1/3"	15mm	F2.2 - F1.6 - C	Manual	C	0.1
3CCD	TF25DA-8B	1/3"	25mm	F2.2 - F1.6 - C	Manual	C	0.2

## 5 MEGAPIXEL FISH-EYE LENS SERIES

5 Megapixel	FE185C046HA-1	1/2"	1.4mm	F1.4 - F16	Manual	C	0.1
5 Megapixel	FE185C057HA-1	2/3"	1.8mm	F1.4 - F16	Manual	C	0.1
5 Megapixel	FE185C086HA-1	1"	2.7mm	F1.8 - F16	Manual	C	0.2