

# **FUJINON**

# **Machine Vision Camera Lens**

# **FUJINON CF-ZA-1S series**



3.45 µm pixel pitch\*1

1.0"~1.1"
Best for IMX253 / 255

Compact
Diameter 39mm

\*1 max, 2.5µm pixel pitch

CF8ZA-1S	CF12ZA-1S	CF16ZA-1S	CF25ZA-1S	CF35ZA-1S	CF50ZA-1S
8mm	12mm	16mm	25mm	35mm	50mm
	F1.8-F16 F2.4-F16				F2.4-F16
85.7° ×67.5°	62.5° ×47.8°	47.3° ×36.1°	32.9° ×24.8°	23.0° ×17.3°	16.6° ×12.5°
∞ - <b>0.1</b> m				∞ - 0.2m	
Manual					
	Manual				
M52×0.75	M37.5×0.5				
C-mount					
180			170	165	155
1.1"					
4.5 4.9		2.7	4.5	4.8	
-4.81	-2.82	-0.80	-0.83	-0.32	-0.17
Φ54×67	Ф39	×67.6	Ф39×67.3		Ф39×68
	8mm 85.7° ×67.5° M52×0.75 4.	8mm 12mm  85.7° ×67.5° 62.5° ×47.8°  ∞ -  M52×0.75  180  4.5  -4.81 -2.82	8mm 12mm 16mm F1.8-F16 85.7° ×67.5° 62.5° ×47.8° 47.3° ×36.1°  ∞ - 0.1m  Ma  M52×0.75  C-m  180  1 4.5  4.9  -4.81  -2.82  -0.80	8mm 12mm 16mm 25mm F1.8-F16  85.7° ×67.5° 62.5° ×47.8° 47.3° ×36.1° 32.9° ×24.8°  ∞ - 0.1m  Manual  M52×0.75  M37.5×0.5  C-mount  180 170 1.1"  4.5 4.9 2.7 -4.81 -2.82 -0.80 -0.83	8mm 12mm 16mm 25mm 35mm  F1.8-F16  85.7° ×67.5° 62.5° ×47.8° 47.3° ×36.1° 32.9° ×24.8° 23.0° ×17.3°  ∞ - 0.1m ∞ - Manual  Manual  M52×0.75  C-mount  180 170 165  1.1"  4.5 4.9 2.7 4.5  -4.81 -2.82 -0.80 -0.83 -0.32

For more information, please check the special website. Note: You can download the specification sheet and the drawing data.

Fujinon machine vision 検索

URL: http://mvlens.fujifilm.com/en/



### **CF-ZA-1S Main Function**



# Function 1 4D High Resolution

Maintain the high resolution from center to corner even when the working distance and F-value are changed.

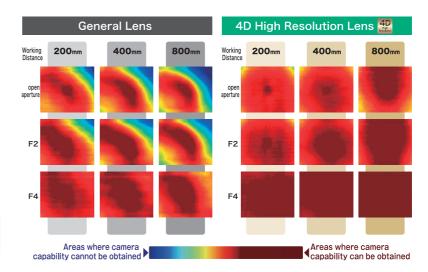


2D: Vertical / Horizontal of screen (Center to Corner)

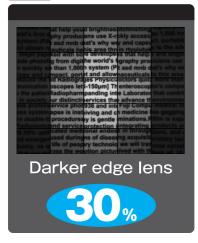
1D: Working Distance

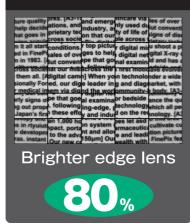
1D : F:No

**FUJINON 4D High Resolution Corresponds** to every installation environment.



## Function 2 HRI (High Relative Illumination) Optical Design





- This lens achieves a high relative illumination of 90% or more.
- Achieves a high relative illumination of 80% or more.(Final image through CMOS sensor) That was achieved by making the CRA (Chief Ray Angle) less than 5 degrees from our original optical design.
- CH-ZA series are bright lenses from the center to the corner. Therefore, correction of the peripheral light intensity is unnecessary in all applications. Moreover, it prevents false recognition of noise caused by electronic correction. They are ideal for efficient and reliable inspection applications, that noise caused by correction is generated. It is ideal for efficient and reliable inspection applications.

### Function 3 Anti Shock & Vibration

- Less than 10um optical axis shift under 10G shock.
- By passing IEC 60068-2-6 test, the resolution is maintained.
- "Focus" and "Iris" can be adjusted even though the lenses still meet the Anti Shock and Vibration recuirements.

Detail information for Anti Shock & Vibration, Please check the special website



### Function 4 Individual Quality Control

The FUJINON lens factory has developed its own inspection system and quantify lens performance. Each lens is given a serial number and its performance is recorded for individual quality control.

