High resolution lenses



HF-HA-1S Series

Fujinon HF-HA-1S Series offers a resolution of up to $6.2\mu m$ pixel pitch (equivalent to 1.5 megapixel) and is suitable for 2/3" sensors*1.

• *1 DF6HA-1S supports 1/2 type.

HF-HA-1S series specification sheet

HF-HA-1S series is the successor series of HF-HA-1B series and offers the same optical performance and the same mechanical dimensions.

Model ()old model name		Compatible format sizes						Focal length (mm)	
	4/3	1.1	1	1/1.2	2/3	1/1.8	1/2	1/3	

DF6HA-1S (DF6HA-1B)	_	_	_	_	_	_	•	•	6
HF9HA-1S (HF9HA-1B)	_	_	_	_	•	•	•	•	9
HF12.5HA-1S (HF12.5HA-1B)	_	_	_	_	•	•	•	•	12.5
HF16HA-1S (HF16HA-1B)	_	_	_	_	•	•	•	•	16
HF25HA-1S (HF25HA-1B)	_	_	_	_	•	•	•	•	25
HF35HA-1S (HF35HA-1B)	_	_	_	_	•	•	•	•	35
HF50HA-1S (HF50HA-1B)	_	_	_	_	•	•	•	•	50
HF75HA-1S (HF75HA-1B)	_	_	_	_	•	•	•	•	75

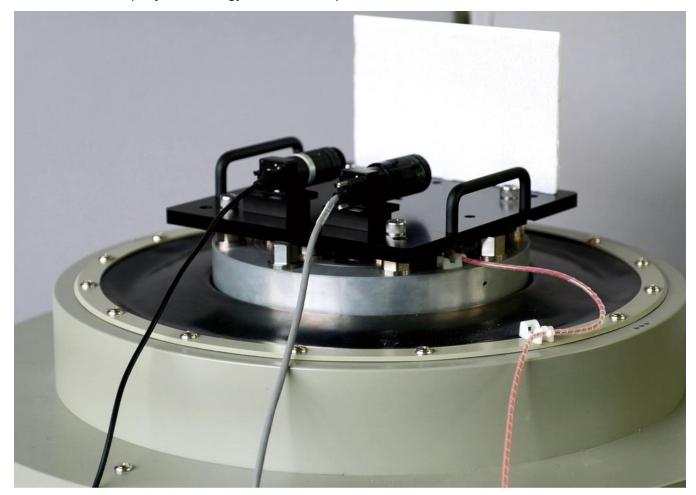
• Compatible sensor size (std.): Ideal size to maximize the target resolution.

Main features

Vibration-resistant and impact-resistant design

The Fujinon lenses incorporate the original mechanical design *2 of Fujifilms´Anti Shock & Vibration Technology. This makes them robust against shocks and vibrations and applicable for various applications and environments.

*2 The company's technology that has been patented



Anti Shock & Vibration

[According to JIS C 60068-2-6]

- Vibration frequency 10-60Hz (amplitude 0.75mm) vibration frequency 60-500Hz (acceleration 100m/S2)
- 50Cycle

Extensive lineup of 8 models

The HF-HA-1S Series consists of 8 models with focal lengths from 6mm to 75mm that fit to almost every application.

Compact design

The lenses realise a compact design with an outer diameter of only φ 29.5mm.

• *Only HF75HA-1S is φ31.5mm

Low F-number

The low F-number up to F1.2 ensures a clear image even in low light situations.

Lineups



DF6HA-1S

Focal length [mm]	6
Iris range (F. no)	F1.2-F16
Angle of view	57.3°x 43.8° (1/2")
Working Distance*2 (mm)	∞-100
Operation of focus	Manual
Operation of iris	Manual
Filter thread [mm]	M27 x 0.5

Mount	C-mount
Weight (approx.) [g]	50
Sensor size (std.)*2	1/2" (4.5µm)
Sensor size (max.)*3	1/2" (4.5µm)
TV distortion [%]	-1.84
Dimension [mm]	Ф29.5×36.7



HF9HA-1S

Focal length [mm]	9
Iris range (F. no)	F1.4-F16
Angle of view	53.3°x 40.5° (2/3")

Working Distance*2 (mm)	∞-100
Operation of focus	Manual
Operation of iris	Manual
Filter thread [mm]	M27 x 0.5
Mount	C-mount
Weight (approx.) [g]	50
Sensor size (std.)*2	2/3" (6.2μm)
Sensor size (max.)*3	2/3" (6.2μm)
TV distortion [%]	-2.00
Dimension [mm]	Ф29.5×35



Anti Shock & Vibration

HF12.5HA-1S

Focal length [mm]	12.5
Iris range (F. no)	F1.4-F16
Angle of view	39.2°x 29.4° (2/3")
Working Distance*2 (mm)	∞-100
Operation of focus	Manual
Operation of iris	Manual
Filter thread [mm]	M25.5 x 0.5
Mount	C-mount
Weight (approx.) [g]	40
Sensor size (std.)*2	2/3" (6.2µm)
Sensor size (max.)*3	2/3" (6.2µm)
TV distortion [%]	-1.95
Dimension [mm]	Ф29.5×29.5



HF16HA-1S

Focal length [mm]	16
Iris range (F. no)	F1.4-F16
Angle of view	30.5°x 22.9° (2/3")
Working Distance*2 (mm)	∞-100
Operation of focus	Manual
Operation of iris	Manual
Filter thread [mm]	M25.5 x 0.5
Mount	C-mount
Weight (approx.) [g]	40

Sensor size (std.)*2	2/3" (6.2µm)
Sensor size (max.)*3	2/3" (6.2µm)
TV distortion [%]	-0.87
Dimension [mm]	Ф29.5×29.5



HF25HA-1S

Focal length [mm]	25
Iris range (F. no)	F1.4-F16
Angle of view	19.4°x 14.6° (2/3")
Working Distance*2 (mm)	∞-150
Operation of focus	Manual

Operation of iris	Manual
Filter thread [mm]	M25.5 x 0.5
Mount	C-mount
Weight (approx.) [g]	40
Sensor size (std.)*2	2/3" (6.2µm)
Sensor size (max.)*3	2/3" (6.2µm)
TV distortion [%]	-0.19
Dimension [mm]	Ф29.5×29.5



HF35HA-1S

Focal length [mm]	35

Iris range (F. nao)	F1.6-F22
Angle of view	14.3°x 10.8° (2/3")
Working Distance*2 (mm)	∞-250
Operation of focus	Manual
Operation of iris	Manual
Filter thread [mm]	M25.5 x 0.5
Mount	C-mount
Weight (approx.) [g]	40
Sensor size (std.)*2	2/3" (6.2µm)
Sensor size (max.)*3	2/3" (6.2μm)
TV distortion [%]	0.10
Dimension [mm]	Ф29.5×29.5



HF50HA-1S

Focal length [mm]	50
Iris range (F. no)	F2.3-F22
Angle of view	10.1°x 7.6° (2/3")
Working Distance*2 (mm)	∞-500
Operation of focus	Manual
Operation of iris	Manual
Filter thread [mm]	M25.5 x 0.5
Mount	C-mount
Weight (approx.) [g]	45

Sensor size (std.)*2	2/3" (6.2µm)
Sensor size (max.)*3	2/3" (6.2µm)
TV distortion [%]	0.06
Dimension [mm]	Ф29.5×29.5

- *1 From front of lens barrel.
- *2 Sensor size (std.): Ideal size to maximize the target resolution.
- *3 Sensor size (max.): Adaptable sensor size varies depending on the model. Please check the amount of light and resolution on the edges pertaining to your particular application.



HF75HA-1S

Focal length [mm]	75
Iris range (F. no)	F2.8-F22
Angle of view	6.7°x 5.0° (2/3")

Working Distance*2 (mm)	∞-1,100
Operation of focus	Manual
Operation of iris	Manual
Filter thread [mm]	M30.5 x 0.5
Mount	C-mount
Weight (approx.) [g]	50
Sensor size (std.)*2	2/3" (6.2μm)
Sensor size (max.)*3	2/3" (6.2μm)
TV distortion [%]	0.36
Dimension [mm]	Ф31.5×48