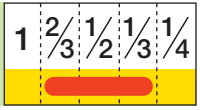
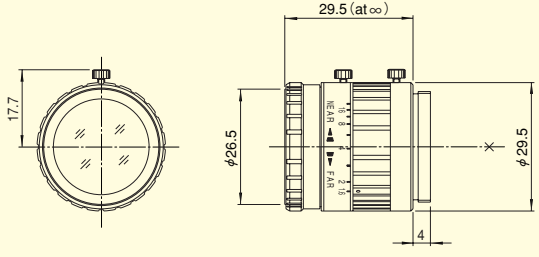
HF35HA-1B

Applicable camera (model)



FIXED Fixed Focal | 1.5 Mega For Megapixel Camera | MANUAL Manual Iris | C-mt C Mount | METAL Metal Mount

- Design achieving the high resolution, supporting up to 1.5 mega pixel cameras
- Designed for low distortion, enabling faithful image input
- Compact, lightweight and robust design, supporting various systems
- Focus & iris lock tab provided, supporting environments such as vibration

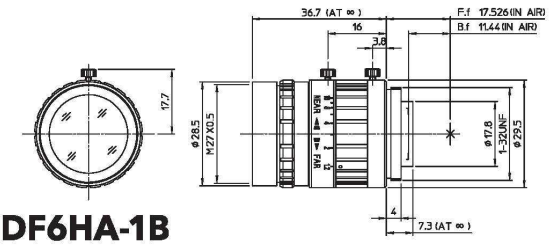


Unit : mm

Focal Length (mm)		35
Iris Range		F1.6 ~ F22
Operation	Focus	Manual
	Iris	Manual
Angle Of View (H×V)	2/3"	14°20′ × 10°46′
	1/2"	10°27′ × 7°51′
	1/3"	7°51′ × 5°53′
Focusing Range (From Front Of The Lens) (m)		∞ ~ 0.25
Object Dimensions at M.O.D. (H×V) (mm)	2/3"	59 × 44
	1/2"	43 × 32
	1/3"	32 × 24
Back Focal Distance (in air) (mm)		15.03
Exit Pupil Position (From Image Plane) (mm)		−26.6
Filter Thread (mm)		M25.5 × 0.5
Mount		C
Mass (g)		45

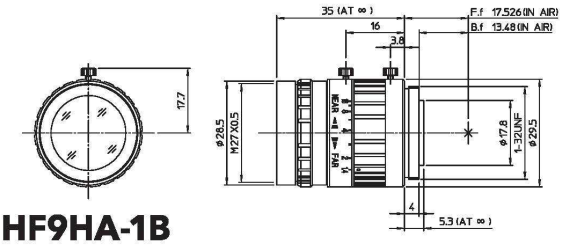
Remarks
- With Metal Mount
- With Locking Knob for Iris and Focus

HF-HA series 1.5 Megapixel, 2/3”



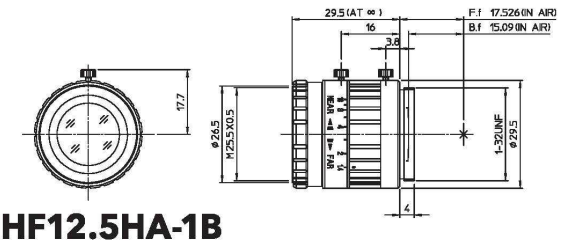
DF6HA-1B

Focal length [mm]	6
Iris range (F. no)	F1.2-F16
Angle of view	57.3°x 43.8°(1/2")
Working Distance (*) [mm]	∞-100
Operation of focus	Manual
Operation of iris	Manual
Filter thread [mm]	M27 x 0.5
Mount	C-mount
Weight (approx.) [g]	55
Sensor size (max.)	1/2"
TV distortion [%]	-1.84
Dimension [mm]	φ29.5×36.8



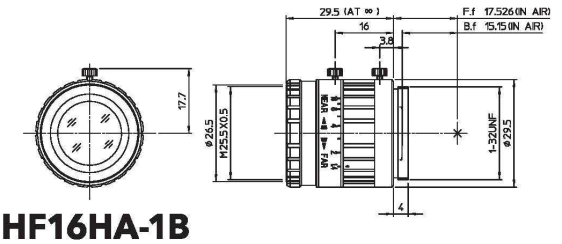
HF9HA-1B

Focal length [mm]	9
Iris range (F. no)	F1.4-F16
Angle of view	53.3°x 40.5°(2/3")
Working Distance (*) [mm]	∞-100
Operation of focus	Manual
Operation of iris	Manual
Filter thread [mm]	M27 x 0.5
Mount	C-mount
Weight (approx.) [g]	55
Sensor size (max.)	2/3"
TV distortion [%]	-2.00
Dimension [mm]	φ29.5×35



HF12.5HA-1B

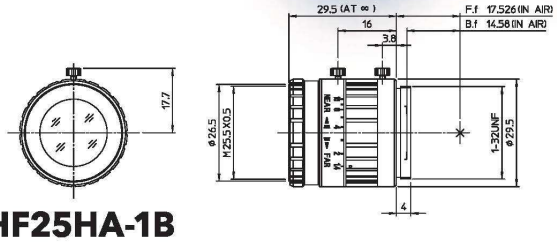
Focal length [mm]	12.5
Iris range (F. no)	F1.4-F16
Angle of view	39.2°x 29.4°(2/3")
Working Distance (*) [mm]	∞-100
Operation of focus	Manual
Operation of iris	Manual
Filter thread [mm]	M25.5 x 0.5
Mount	C-mount
Weight (approx.) [g]	45
Sensor size (max.)	2/3"
TV distortion [%]	-1.95
Dimension [mm]	φ29.5×29.5



HF16HA-1B

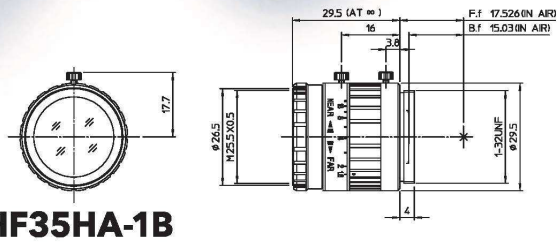
Focal length [mm]	16
Iris range (F. no)	F1.4-F16
Angle of view	30.5°x 22.9°(2/3")
Working Distance (*) [mm]	∞-100
Operation of focus	Manual
Operation of iris	Manual
Filter thread [mm]	M25.5 x 0.5
Mount	C-mount
Weight (approx.) [g]	45
Sensor size (max.)	2/3"
TV distortion [%]	-0.87
Dimension [mm]	φ29.5×29.5

Please download the specification sheet and the drawing data.



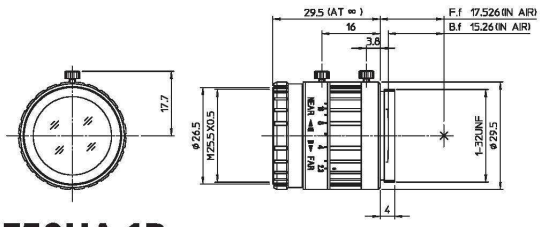
HF25HA-1B

Focal length [mm]	25
Iris range (F. no)	F1.4-F16
Angle of view	19.4°x 14.6°(2/3")
Working Distance (*) [mm]	∞-150
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 (max.)	2/3"
TV distortion [%]	-0.19
Dimension [mm]	ϕ29.5×29.5



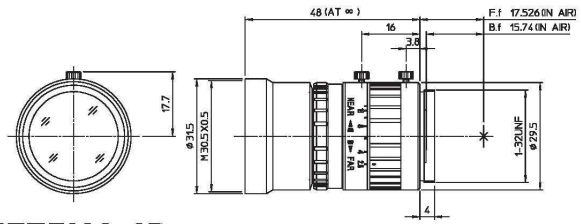
HF35HA-1B

Focal length [mm]	35
Iris range (F. no)	F1.6-F22
Angle of view	14.3°x 10.8°(2/3")
Working Distance (*) [mm]	∞-250
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 (max.)	2/3"
TV distortion [%]	0.10
Dimension [mm]	ϕ29.5×29.5



HF50HA-1B

Focal length [mm]	50
Iris range (F. no)	F2.3-F22
Working Distance (*) [mm]	10.1°x 7.6°(2/3")
Operation of focus	∞-500
Operation of iris	Manual
Filter thread [mm]	Manual
Mount	M25.5 x 0.5
Weight (approx.) [g]	C-mount
Sensor size (max.)	45
TV distortion [%]	2/3"
Dimension [mm]	0.06
	ϕ29.5×29.5



HF75HA-1B

Focal length [mm]	75
Iris range (F. no)	F2.8-F22
Angle of view	6.7°x 5.0°(2/3")
Working Distance (*) [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]	55
Sensor size (max.)	2/3"
TV distortion [%]	0.36
Dimension [mm]	ϕ29.5×48

* From front of lens barrel

FUJIFILM FUJINON

Ver.3.1

型番	Product Name	DF6HA-1S
焦点距離 [mm]	Focal length [mm]	6
	(design value)	(6.15)
絞り範囲 (F値)	Iris range (Fnumber)	F1.2-F16
画角 (H × V)	Angle of view	57.3° × 43.8° (1/2")
フォーカス範囲 (レンズメカ先端より) [mm] ※	Working distance (from front of lens barrel) [mm] ※	∞ - 10
操作方法:フォーカス	Operation of focus	Manual
操作方法:アイリス	Operation of iris	Manual
フィルタ径 [mm]	Filter thread [mm]	M27 × 0.5
マウント	Mount	C-mount
質量 (約) [g]	Weight (approx.) [g]	50
適合センサーサイズ (標準)	Sensor size (std.)	1/2" (4.5μm)
適合センサーサイズ (最大)	Sensor size (max.)	1/2" (4.5μm)
バックフォーカス (空気換算長) [mm]	Back focal length (in air) [mm]	11.44
フランジバック [mm]	Flange back [mm]	17.526
入射瞳位置 (マウント面から) [mm]	Entrance pupil position (from Mount) [mm]	-21.24
射出瞳位置 (結像面より) [mm]	Exit pupil position (from image plane) [mm]	-49.19
前側主点 (マウント面から) [mm]	Front principal point (from Mount) [mm]	-16.45
後側主点 (マウント面から) [mm]	Rear principal point (from Mount) [mm]	11.38
主点間隔 [mm]	Distance between the principal points [mm]	27.83
TVディストーション [%]	TV distortion [%]	-1.84
外形寸法 [mm]	Dimension [mm]	φ29.5 × 36.7
主光線入射角度 [°]	Chief Ray Angle [°]	3.97
周辺光量比 (F4.0・対角端) [%]	Relative illumination [%] (Aperture: F4.0, Image height : at diagonal)	108
周辺光量比 (開放・対角端) [%]	Relative illumination [%] (Aperture: at full open, Image height : at diagonal)	39
使用温度範囲	Operation Temperature Range	-10℃ ～ +50℃
保存温度範囲	Storage Temperature Range	-30℃ ～ +60℃

※フォーカス範囲の定義をピント調整が可能な範囲に変更しました。(2020年3月)

05-Mar-20

Changed the definition of working distance to a range where focus adjustment is possible.(Mar. 2020)

These specifications are subject to change without notice.

FUJIFILM FUJINON

Ver.3.1

型番	Product Name	HF9HA-1S
焦点距離 [mm]	Focal length [mm]	9
	(design value)	(9.23)
絞り範囲 (F値)	Iris range (Fnumber)	F1.4-F16
画角 (H × V)	Angle of view	53.3° × 40.5° (2/3")
フォーカス範囲 (レンズメカ先端より) [mm] ※	Working distance (from front of lens barrel) [mm] ※	∞ - 40
操作方法:フォーカス	Operation of focus	Manual
操作方法:アイリス	Operation of iris	Manual
フィルタ径 [mm]	Filter thread [mm]	M27 × 0.5
マウント	Mount	C-mount
質量 (約) [g]	Weight (approx.) [g]	50
適合センサーサイズ (標準)	Sensor size (std.)	2/3" (6.2μm)
適合センサーサイズ (最大)	Sensor size (max.)	2/3" (6.2μm)
バックフォーカス (空気換算長) [mm]	Back focal length (in air) [mm]	13.48
フランジバック [mm]	Flange back [mm]	17.526
入射瞳位置 (マウント面から) [mm]	Entrance pupil position (from Mount) [mm]	-18.45
射出瞳位置 (結像面より) [mm]	Exit pupil position (from image plane) [mm]	-28.33
前側主点 (マウント面から) [mm]	Front principal point (from Mount) [mm]	-12.91
後側主点 (マウント面から) [mm]	Rear principal point (from Mount) [mm]	8.30
主点間隔 [mm]	Distance between the principal points [mm]	21.21
TVディストーション [%]	TV distortion [%]	-2.00
外形寸法 [mm]	Dimension [mm]	φ29.5 × 35.0
主光線入射角度 [°]	Chief Ray Angle [°]	10.65
周辺光量比 (F4.0・対角端) [%]	Relative illumination [%] (Aperture: F4.0, Image height : at diagonal)	73
周辺光量比 (開放・対角端) [%]	Relative illumination [%] (Aperture: at full open, Image height : at diagonal)	32
使用温度範囲	Operation Temperature Range	-10℃ ～ +50℃
保存温度範囲	Storage Temperature Range	-30℃ ～ +60℃

※フォーカス範囲の定義をピント調整が可能な範囲に変更しました。(2020年3月)

05-Mar-20

Changed the definition of working distance to a range where focus adjustment is possible.(Mar. 2020)

These specifications are subject to change without notice.

FUJIFILM FUJINON

Ver.3.1

型番	Product Name	HF12.5HA-1S
焦点距離 [mm]	Focal length [mm]	12.5
	(design value)	(12.88)
絞り範囲 (F値)	Iris range (Fnumber)	F1.4-F16
画角 (H × V)	Angle of view	39.2° × 29.4° (2/3")
フォーカス範囲 (レンズメカ先端より) [mm] ※	Working distance (from front of lens barrel) [mm] ※	∞ - 20
操作方法:フォーカス	Operation of focus	Manual
操作方法:アイリス	Operation of iris	Manual
フィルタ径 [mm]	Filter thread [mm]	M25.5 × 0.5
マウント	Mount	C-mount
質量 (約) [g]	Weight (approx.) [g]	40
適合センサーサイズ (標準)	Sensor size (std.)	2/3" (6.2μm)
適合センサーサイズ (最大)	Sensor size (max.)	2/3" (6.2μm)
バックフォーカス (空気換算長) [mm]	Back focal length (in air) [mm]	15.09
フランジバック [mm]	Flange back [mm]	17.526
入射瞳位置 (マウント面から) [mm]	Entrance pupil position (from Mount) [mm]	-9.86
射出瞳位置 (結像面より) [mm]	Exit pupil position (from image plane) [mm]	-31.33
前側主点 (マウント面から) [mm]	Front principal point (from Mount) [mm]	-2.85
後側主点 (マウント面から) [mm]	Rear principal point (from Mount) [mm]	4.65
主点間隔 [mm]	Distance between the principal points [mm]	7.49
TVディストーション [%]	TV distortion [%]	-1.95
外形寸法 [mm]	Dimension [mm]	φ29.5 × 29.5
主光線入射角度 [°]	Chief Ray Angle [°]	9.50
周辺光量比 (F4.0・対角端) [%]	Relative illumination [%] (Aperture: F4.0, Image height : at diagonal)	98
周辺光量比 (開放・対角端) [%]	Relative illumination [%] (Aperture: at full open, Image height : at diagonal)	36
使用温度範囲	Operation Temperature Range	-10℃ ～ +50℃
保存温度範囲	Storage Temperature Range	-30℃ ～ +60℃

※フォーカス範囲の定義をピント調整が可能な範囲に変更しました。(2020年3月)

05-Mar-20

Changed the definition of working distance to a range where focus adjustment is possible.(Mar. 2020)

These specifications are subject to change without notice.

FUJIFILM FUJINON

Ver.3.1

型番	Product Name	HF16HA-1S
焦点距離 [mm]	Focal length [mm]	16
	(design value)	(16.49)
絞り範囲 (F値)	Iris range (Fnumber)	F1.4-F16
画角 (H × V)	Angle of view	30.5° × 22.9° (2/3")
フォーカス範囲 (レンズメカ先端より) [mm] ※	Working distance (from front of lens barrel) [mm] ※	∞ - 40
操作方法:フォーカス	Operation of focus	Manual
操作方法:アイリス	Operation of iris	Manual
フィルタ径 [mm]	Filter thread [mm]	M25.5 × 0.5
マウント	Mount	C-mount
質量 (約) [g]	Weight (approx.) [g]	40
適合センサーサイズ (標準)	Sensor size (std.)	2/3" (6.2μm)
適合センサーサイズ (最大)	Sensor size (max.)	2/3" (6.2μm)
バックフォーカス (空気換算長) [mm]	Back focal length (in air) [mm]	15.15
フランジバック [mm]	Flange back [mm]	17.526
入射瞳位置 (マウント面から) [mm]	Entrance pupil position (from Mount) [mm]	-3.92
射出瞳位置 (結像面より) [mm]	Exit pupil position (from image plane) [mm]	-30.95
前側主点 (マウント面から) [mm]	Front principal point (from Mount) [mm]	3.05
後側主点 (マウント面から) [mm]	Rear principal point (from Mount) [mm]	1.03
主点間隔 [mm]	Distance between the principal points [mm]	-2.02
TVディストーション [%]	TV distortion [%]	-0.87
外形寸法 [mm]	Dimension [mm]	φ29.5 × 29.5
主光線入射角度 [°]	Chief Ray Angle [°]	9.71
周辺光量比 (F4.0・対角端) [%]	Relative illumination [%] (Aperture: F4.0, Image height : at diagonal)	82
周辺光量比 (開放・対角端) [%]	Relative illumination [%] (Aperture: at full open, Image height : at diagonal)	36
使用温度範囲	Operation Temperature Range	-10℃ ～ +50℃
保存温度範囲	Storage Temperature Range	-30℃ ～ +60℃

※フォーカス範囲の定義をピント調整が可能な範囲に変更しました。(2020年3月)

05-Mar-20

Changed the definition of working distance to a range where focus adjustment is possible.(Mar. 2020)

These specifications are subject to change without notice.

FUJIFILM FUJINON

Ver.3.1

型番	Product Name	HF25HA-1S
焦点距離 [mm]	Focal length [mm]	25
	(design value)	(25.80)
絞り範囲 (F値)	Iris range (Fnumber)	F1.4-F16
画角 (H × V)	Angle of view	19.4° × 14.6° (2/3")
フォーカス範囲 (レンズメカ先端より) [mm] ※	Working distance (from front of lens barrel) [mm] ※	∞ - 120
操作方法:フォーカス	Operation of focus	Manual
操作方法:アイリス	Operation of iris	Manual
フィルタ径 [mm]	Filter thread [mm]	M25.5 × 0.5
マウント	Mount	C-mount
質量 (約) [g]	Weight (approx.) [g]	40
適合センサーサイズ (標準)	Sensor size (std.)	2/3" (6.2μm)
適合センサーサイズ (最大)	Sensor size (max.)	2/3" (6.2μm)
バックフォーカス (空気換算長) [mm]	Back focal length (in air) [mm]	14.58
フランジバック [mm]	Flange back [mm]	17.526
入射瞳位置 (マウント面から) [mm]	Entrance pupil position (from Mount) [mm]	-2.57
射出瞳位置 (結像面より) [mm]	Exit pupil position (from image plane) [mm]	-32.43
前側主点 (マウント面から) [mm]	Front principal point (from Mount) [mm]	1.83
後側主点 (マウント面から) [mm]	Rear principal point (from Mount) [mm]	-8.28
主点間隔 [mm]	Distance between the principal points [mm]	-10.11
TVディストーション [%]	TV distortion [%]	-0.19
外形寸法 [mm]	Dimension [mm]	φ29.5 × 29.5
主光線入射角度 [°]	Chief Ray Angle [°]	9.22
周辺光量比 (F4.0・対角端) [%]	Relative illumination [%] (Aperture: F4.0, Image height : at diagonal)	99
周辺光量比 (開放・対角端) [%]	Relative illumination [%] (Aperture: at full open, Image height : at diagonal)	46
使用温度範囲	Operation Temperature Range	-10℃ ～ +50℃
保存温度範囲	Storage Temperature Range	-30℃ ～ +60℃

※フォーカス範囲の定義をピント調整が可能な範囲に変更しました。(2020年3月)

05-Mar-20

Changed the definition of working distance to a range where focus adjustment is possible.(Mar. 2020)

These specifications are subject to change without notice.

FUJIFILM FUJINON

Ver.3.1

型番	Product Name	HF35HA-1S
焦点距離 [mm]	Focal length [mm]	35
	(design value)	(34.99)
絞り範囲 (F値)	Iris range (Fnumber)	F1.6-F22
画角 (H × V)	Angle of view	14.3° × 10.8° (2/3")
フォーカス範囲 (レンズメカ先端より) [mm] ※	Working distance (from front of lens barrel) [mm] ※	∞ - 230
操作方法:フォーカス	Operation of focus	Manual
操作方法:アイリス	Operation of iris	Manual
フィルタ径 [mm]	Filter thread [mm]	M25.5 × 0.5
マウント	Mount	C-mount
質量 (約) [g]	Weight (approx.) [g]	40
適合センサーサイズ (標準)	Sensor size (std.)	2/3" (6.2μm)
適合センサーサイズ (最大)	Sensor size (max.)	2/3" (6.2μm)
バックフォーカス (空気換算長) [mm]	Back focal length (in air) [mm]	15.00
フランジバック [mm]	Flange back [mm]	17.526
入射瞳位置 (マウント面から) [mm]	Entrance pupil position (from Mount) [mm]	2.48
射出瞳位置 (結像面より) [mm]	Exit pupil position (from image plane) [mm]	-26.71
前側主点 (マウント面から) [mm]	Front principal point (from Mount) [mm]	-9.00
後側主点 (マウント面から) [mm]	Rear principal point (from Mount) [mm]	-17.47
主点間隔 [mm]	Distance between the principal points [mm]	-8.47
TVディストーション [%]	TV distortion [%]	0.09
外形寸法 [mm]	Dimension [mm]	φ29.5 × 29.5
主光線入射角度 [°]	Chief Ray Angle [°]	11.52
周辺光量比 (F4.0・対角端) [%]	Relative illumination [%] (Aperture: F4.0, Image height : at diagonal)	96
周辺光量比 (開放・対角端) [%]	Relative illumination [%] (Aperture: at full open, Image height : at diagonal)	58
使用温度範囲	Operation Temperature Range	-10℃ ～ +50℃
保存温度範囲	Storage Temperature Range	-30℃ ～ +60℃

※フォーカス範囲の定義をピント調整が可能な範囲に変更しました。(2020年3月)

05-Mar-20

Changed the definition of working distance to a range where focus adjustment is possible.(Mar. 2020)

These specifications are subject to change without notice.

FUJIFILM FUJINON

Ver.3.1

型番	Product Name	HF50HA-1S
焦点距離 [mm]	Focal length [mm]	50
	(design value)	(49.56)
絞り範囲 (F値)	Iris range (Fnumber)	F2.3-F22
画角 (H × V)	Angle of view	10.1° × 7.6° (2/3")
フォーカス範囲 (レンズメカ先端より) [mm] ※	Working distance (from front of lens barrel) [mm] ※	∞ - 500
操作方法:フォーカス	Operation of focus	Manual
操作方法:アイリス	Operation of iris	Manual
フィルタ径 [mm]	Filter thread [mm]	M25.5 × 0.5
マウント	Mount	C-mount
質量 (約) [g]	Weight (approx.) [g]	40
適合センサーサイズ (標準)	Sensor size (std.)	2/3" (6.2μm)
適合センサーサイズ (最大)	Sensor size (max.)	2/3" (6.2μm)
バックフォーカス (空気換算長) [mm]	Back focal length (in air) [mm]	15.24
フランジバック [mm]	Flange back [mm]	17.526
入射瞳位置 (マウント面から) [mm]	Entrance pupil position (from Mount) [mm]	6.05
射出瞳位置 (結像面より) [mm]	Exit pupil position (from image plane) [mm]	-25.14
前側主点 (マウント面から) [mm]	Front principal point (from Mount) [mm]	-42.63
後側主点 (マウント面から) [mm]	Rear principal point (from Mount) [mm]	-32.03
主点間隔 [mm]	Distance between the principal points [mm]	10.60
TVディストーション [%]	TV distortion [%]	0.06
外形寸法 [mm]	Dimension [mm]	φ29.5 × 29.5
主光線入射角度 [°]	Chief Ray Angle [°]	12.25
周辺光量比 (F4.0・対角端) [%]	Relative illumination [%] (Aperture: F4.0, Image height : at diagonal)	97
周辺光量比 (開放・対角端) [%]	Relative illumination [%] (Aperture: at full open, Image height : at diagonal)	61
使用温度範囲	Operation Temperature Range	-10℃ ～ +50℃
保存温度範囲	Storage Temperature Range	-30℃ ～ +60℃

※フォーカス範囲の定義をピント調整が可能な範囲に変更しました。(2020年3月)

05-Mar-20

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FUJIFILM FUJINON

Ver.3.1

型番	Product Name	HF75HA-1S
焦点距離 [mm]	Focal length [mm]	75
	(design value)	(75.01)
絞り範囲 (F値)	Iris range (Fnumber)	F2.8-F22
画角 (H × V)	Angle of view	6.7° × 5.0° (2/3")
フォーカス範囲 (レンズメカ先端より) [mm] ※	Working distance (from front of lens barrel) [mm] ※	∞ - 1,100
操作方法:フォーカス	Operation of focus	Manual
操作方法:アイリス	Operation of iris	Manual
フィルタ径 [mm]	Filter thread [mm]	M30.5 × 0.5
マウント	Mount	C-mount
質量 (約) [g]	Weight (approx.) [g]	50
適合センサーサイズ (標準)	Sensor size (std.)	2/3" (6.2μm)
適合センサーサイズ (最大)	Sensor size (max.)	2/3" (6.2μm)
バックフォーカス (空気換算長) [mm]	Back focal length (in air) [mm]	15.75
フランジバック [mm]	Flange back [mm]	17.526
入射瞳位置 (マウント面から) [mm]	Entrance pupil position (from Mount) [mm]	35.48
射出瞳位置 (結像面より) [mm]	Exit pupil position (from image plane) [mm]	-26.71
前側主点 (マウント面から) [mm]	Front principal point (from Mount) [mm]	-100.77
後側主点 (マウント面から) [mm]	Rear principal point (from Mount) [mm]	-57.48
主点間隔 [mm]	Distance between the principal points [mm]	43.29
TVディストーション [%]	TV distortion [%]	0.36
外形寸法 [mm]	Dimension [mm]	φ31.5 × 48.0
主光線入射角度 [°]	Chief Ray Angle [°]	11.57
周辺光量比 (F4.0・対角端) [%]	Relative illumination [%] (Aperture: F4.0, Image height : at diagonal)	88
周辺光量比 (開放・対角端) [%]	Relative illumination [%] (Aperture: at full open, Image height : at diagonal)	68
使用温度範囲	Operation Temperature Range	-10℃ ～ +50℃
保存温度範囲	Storage Temperature Range	-30℃ ～ +60℃

※フォーカス範囲の定義をピント調整が可能な範囲に変更しました。(2020年3月)

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