

HF-HA-1S series, 1/2"-2/3", 6.2μm, 1.5 MP



Distribution in the UK & Ireland



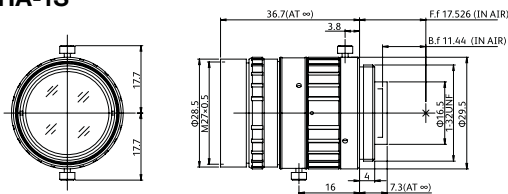
- Wide range of focal lengths with 8 models
- Compact design with an external diameter of 29.5mm*
- Large maximum aperture
- Short Minimum Object Distance

* HF75HA-1S has a diameter of 31.5mm

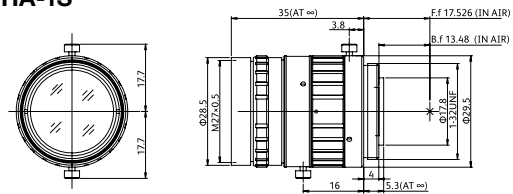
Lambda Photometrics Limited
 Lambda House Batford Mill
 Harpenden Herts AL5 5BZ
 United Kingdom
 E: info@lambdaphoto.co.uk
 W: www.lambdaphoto.co.uk
 T: +44 (0)1582 764334
 F: +44 (0)1582 712084

	Anti Shock & Vibration DF6HA-1S	Anti Shock & Vibration HF9HA-1S	Anti Shock & Vibration HF12.5HA-1S	Anti Shock & Vibration HF16HA-1S
Focal length [mm]	6	9	12.5	16
Iris range [F. no]	F1.2-F16	F1.4-F16	F1.4-F16	F1.4-F16
Angle of view	57.3°×43.8°(1/2")	53.3°×40.5°(2/3")	39.2°×29.4°(2/3")	30.5°×22.9°(2/3")
Working Distance*1 [mm]	∞-10	∞-40	∞-20	∞-40
Operation of focus	Manual	Manual	Manual	Manual
Operation of iris	Manual	Manual	Manual	Manual
Filter thread [mm]	M27×0.5	M27×0.5	M25.5×0.5	M25.5×0.5
Mount	C-mount	C-mount	C-mount	C-mount
Weight (approx.) [g]	50	50	40	40
Sensor size (std.)*2	1/2"(4.5μm)	2/3"(6.2μm)	2/3"(6.2μm)	2/3"(6.2μm)
Sensor size (max.)*3	1/2"(4.5μm)	2/3"(6.2μm)	2/3"(6.2μm)	2/3"(6.2μm)
TV distortion [%]	-1.84	-2.00	-1.95	-0.87
Dimension [mm]	ø29.5×36.7	ø29.5×35	ø29.5×29.5	ø29.5×29.5

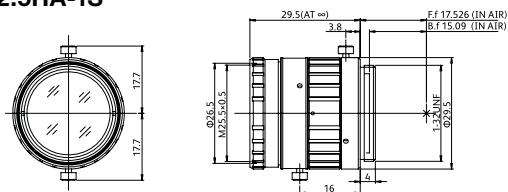
DF6HA-1S



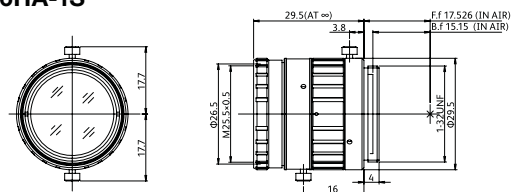
HF9HA-1S



HF12.5HA-1S



HF16HA-1S



*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.



Anti Shock & Vibration

HF25HA-1S

Anti Shock & Vibration

HF35HA-1S

Anti Shock & Vibration

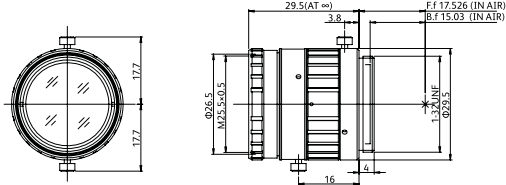
HF50HA-1S

Anti Shock & Vibration

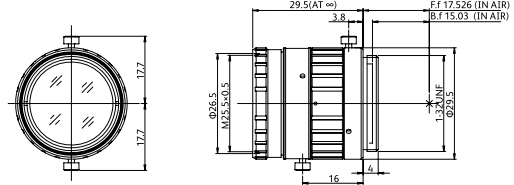
HF75HA-1S

Focal length [mm]	25	35	50	75
Iris range [F. no]	F1.4-F16	F1.6-F22	F2.3-F22	F2.8-F22
Angle of view	19.4°×14.6°(2/3")	14.3°×10.8°(2/3")	10.1°×7.6°(2/3")	6.7°×5.0°(2/3")
Working Distance*1 [mm]	∞-120	∞-230	∞-500	∞-1,100
Operation of focus	Manual	Manual	Manual	Manual
Operation of iris	Manual	Manual	Manual	Manual
Filter thread [mm]	M25.5×0.5	M25.5×0.5	M25.5×0.5	M30.5×0.5
Mount	C-mount	C-mount	C-mount	C-mount
Weight (approx.) [g]	40	40	40	50
Sensor size (std.)*2	2/3"(6.2μm)	2/3"(6.2μm)	2/3"(6.2μm)	2/3"(6.2μm)
Sensor size (max.)*3	2/3"(6.2μm)	2/3"(6.2μm)	2/3"(6.2μm)	2/3"(6.2μm)
TV distortion [%]	-0.19	0.10	0.06	0.36
Dimension [mm]	ø29.5×29.5	ø29.5×29.5	ø29.5×29.5	ø31.5×48

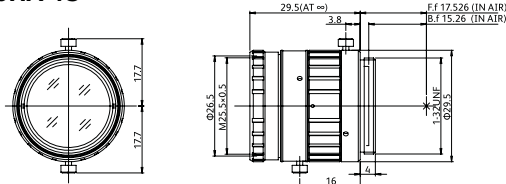
HF25HA-1S



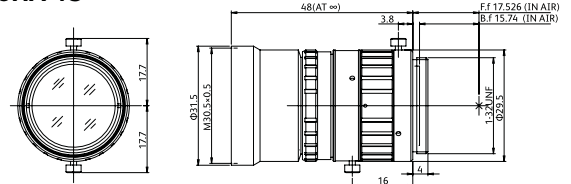
HF35HA-1S



HF50HA-1S



HF75HA-1S



HF-HA-1S series

DF6HA-1S

Working Distance [mm]	Optical Magnification	Extension Tube [mm]	Field of View [mm]					
			2/3°		1/2°		1/3°	
			H	V	H	V	H	V
1000	0.006x	-	-	-	1109.3	816.0	816.0	604.3
950	0.006x	-	-	-	1054.7	775.8	775.8	574.6
900	0.007x	-	-	-	1000.1	735.6	735.6	544.8
850	0.007x	-	-	-	945.4	695.3	695.3	515.0
800	0.008x	-	-	-	890.8	655.1	655.1	485.2
750	0.008x	-	-	-	836.2	614.9	614.9	455.4
700	0.009x	-	-	-	781.6	574.7	574.7	425.6
650	0.009x	-	-	-	726.9	534.5	534.5	395.8
600	0.010x	-	-	-	672.3	494.3	494.3	366.1
550	0.011x	-	-	-	617.7	454.1	454.1	336.3
500	0.012x	-	-	-	563.1	413.9	413.9	306.5
450	0.013x	-	-	-	508.4	373.7	373.7	276.7
400	0.015x	-	-	-	453.8	333.5	333.5	246.9
350	0.017x	-	-	-	399.2	293.3	293.3	217.1
300	0.020x	-	-	-	344.6	253.1	253.1	187.3
250	0.023x	-	-	-	289.9	212.9	212.9	157.5
200	0.029x	-	-	-	235.3	172.7	172.7	127.7
150	0.037x	-	-	-	180.7	132.5	132.5	97.9
100	0.054x	-	-	-	126.0	92.3	92.3	68.2

HF12.5HA-1S

Working Distance [mm]	Optical Magnification	Extension Tube [mm]	Field of View [mm]					
			2/3°		1/2°		1/3°	
			H	V	H	V	H	V
1000	0.013x	-	723.3	532.3	515.4	382.7	382.7	285.4
950	0.013x	-	687.6	506.1	490.0	363.8	363.8	271.3
900	0.014x	-	652.0	479.8	464.6	344.9	344.9	257.2
850	0.015x	-	616.3	453.6	439.2	326.1	326.1	243.2
800	0.016x	-	580.7	427.3	413.8	307.2	307.2	229.1
750	0.017x	-	545.0	401.1	388.4	288.3	288.3	215.0
700	0.018x	-	509.4	374.8	363.0	269.5	269.5	200.9
650	0.019x	-	473.7	348.6	337.5	250.6	250.6	186.9
600	0.021x	-	438.1	322.4	312.1	231.7	231.7	172.8
550	0.023x	-	402.4	296.1	286.7	212.8	212.8	158.7
500	0.025x	-	366.8	269.9	261.3	194.0	194.0	144.6
450	0.028x	-	331.1	243.6	235.9	175.1	175.1	130.6
400	0.031x	-	295.5	217.4	210.5	156.2	156.2	116.5
350	0.035x	-	259.8	191.1	185.0	137.3	137.3	102.4
300	0.041x	-	224.2	164.9	159.6	118.5	118.5	88.3
250	0.049x	-	188.5	138.6	134.2	99.6	99.6	74.3
200	0.060x	-	152.9	112.4	108.8	80.7	80.7	60.2
150	0.079x	-	117.2	86.1	83.4	61.9	61.9	46.1
100	0.113x	-	81.5	59.8	57.9	43.0	43.0	32.0

HF25HA-1S

Working Distance [mm]	Optical Magnification	Extension Tube [mm]	Field of View [mm]					
			2/3°		1/2°		1/3°	
			H	V	H	V	H	V
1000	0.026x	-	344.7	257.9	250.1	187.3	187.3	140.4
950	0.027x	-	327.6	245.1	237.6	178.0	178.0	133.4
900	0.029x	-	310.5	232.3	225.2	168.7	168.7	126.4
850	0.030x	-	293.4	219.5	212.8	159.4	159.4	119.4
800	0.032x	-	276.3	206.7	200.4	150.1	150.1	112.5
750	0.034x	-	259.1	193.8	187.9	140.8	140.8	105.5
700	0.037x	-	242.0	181.0	175.5	131.4	131.4	98.5
650	0.039x	-	224.9	168.2	163.1	122.1	122.1	91.5
600	0.043x	-	207.8	155.4	150.6	112.8	112.8	84.5
550	0.046x	-	190.6	142.6	138.2	103.5	103.5	77.6
500	0.051x	-	173.5	129.8	125.8	94.2	94.2	70.6
450	0.057x	-	156.4	116.9	113.4	84.9	84.9	63.6
400	0.064x	-	139.3	104.1	100.9	75.6	75.6	56.6
350	0.073x	-	122.1	91.3	88.5	66.3	66.3	49.6
300	0.084x	-	105.0	78.5	76.1	56.9	56.9	42.7
250	0.101x	-	87.9	65.6	63.6	47.6	47.6	35.7
200	0.126x	-	70.7	52.8	51.2	38.3	38.3	28.7
150	0.166x	-	53.6	40.0	38.8	29.0	29.0	21.7
100	0.245x	5	36.4	27.2	26.3	19.7	19.7	14.7

HF50HA-1S

Working Distance [mm]	Optical Magnification	Extension Tube [mm]	Field of View [mm]					
			2/3°		1/2°		1/3°	
			H	V	H	V	H	V
1500	0.034x	-	254.8	191.2	185.4	139.1	139.1	104.4
1450	0.036x	-	245.9	184.5	179.0	134.3	134.3	100.7
1400	0.037x	-	237.1	177.9	172.5	129.4	129.4	97.1
1350	0.039x	-	228.2	171.2	166.1	124.6	124.6	93.5
1300	0.040x	-	219.4	164.6	159.6	119.8	119.8	89.8
1250	0.042x	-	210.5	157.9	153.2	114.9	114.9	86.2
1200	0.044x	-	201.7	151.3	146.7	110.1	110.1	82.6
1150	0.046x	-	192.8	144.7	140.3	105.2	105.2	78.9
1100	0.048x	-	183.9	138.0	133.8	100.4	100.4	75.3
1050	0.050x	-	175.1	131.4	127.4	95.6	95.6	71.7
1000	0.053x	-	166.2	124.7	120.9	90.7	90.7	68.1
950	0.056x	-	157.4	118.1	114.5	85.9	85.9	64.4
900	0.059x	-	148.5	111.4	108.0	81.0	81.0	60.8
850	0.063x	-	139.6	104.8	101.6	76.2	76.2	57.2
800	0.067x	-	130.8	98.1	95.1	71.4	71.4	53.5
750	0.072x	-	121.9	91.5	88.7	66.5	66.5	49.9
700	0.078x	-	113.1	84.8	82.2	61.7	61.7	46.3
650	0.084x	-	104.2	78.2	75.8	56.9	56.9	42.6
600	0.092x	-	95.3	71.5	69.3	52.0	52.0	39.0
550	0.102x	-	86.5	64.9	62.9	47.2	47.2	35.4
500	0.113x	-	77.6	58.2	56.4	42.3	42.3	31.8
450	0.128x	1	68.7	51.6	50.0	37.5	37.5	28.1
400	0.147x	2	59.9	44.9	43.5	32.7	32.7	24.5
350	0.173x	5	51.0	38.2	37.1	27.8	27.8	20.9
300	0.209x	5	42.1	31.6	30.6	23.0	23.0	17.2
250	0.265x	10	33.3	24.9	24.2	18.1	18.1	13.6
200	0.361x	15	24.4	18.3	17.7	13.3	13.3	10.0
150	0.568x	25	15.5	11.6	11.3	8.5	8.5	6.3
100	1.330x	65	6.6	5.0	4.8	3.6	3.6	2.7

<Sensor size>

1.1"	14.1X10.6
1"	12.8X9.6
1/1.2"	10.7X8.0
2/3"	8.8X6.6
1/2"	6.4X4.8
1/3"	4.8X3.6

* This data shows simulation value.
* When attached with an extension tube, the optical performance of the lenses is not covered under warranty.

HF9HA-1S

Working Distance [mm]	Optical Magnification	Extension Tube [mm]	Field of View [mm]					
			2/3°		1/2°		1/3°	
			H	V	H	V	H	V
1000	0.009x	-	1018.3	747.5	723.6	535.9	535.9	399.0
950	0.010x	-	968.1	710.6	687.9	509.4	509.4	379.3
900	0.010x	-	917.9	673.8	652.2	483.0	483.0	359.6
850	0.011x	-	867.7	636.9	616.5	456.5	456.5	339.9
800	0.011x	-	817.4	600.0	580.8	430.1	430.1	320.2
750	0.012x	-	767.2	563.1	545.1	403.6	403.6	300.5
700	0.013x	-	717.0	526.2	509.4	377.2	377.2	280.8
650	0.014x	-	666.8	489.3	473.7	350.8	350.8	261.1
600	0.015x	-	616.6	452.5	438.0	324.3	324.3	241.4
550	0.016x	-	566.4	415.6	402.2	297.9	297.9	221.7
500	0.018x	-	516.2	378.7	366.5	271.4	271.4	202.0
450	0.020x	-	465.9	341.8	330.8	245.0	245.0	182.3
400	0.022x	-	415.7	304.9	295.1	218.5	218.5	162.7
350	0.025x	-	365.5	268.0	259.4	192.1	192.1	143.0
300	0.029x	-	315.3	231.1	223.7	165.6	165.6	123.3
250	0.035x	-	265.1	194.3	188.0	139.2	139.2	103.6
200	0.043x	-	214.8	157.4	152.3	112.7	112.7	83.9
150	0.057x	-	164.6	120.5	116.6	86.3	86.3	64.2
100	0.082x	-	114.4	83.6	80.9	59.8	59.8	44.5

HF16HA-1S

Working Distance [mm]	Optical Magnification	Extension Tube [mm]	Field of View [mm]					
			2/3°		1/2°		1/3°	
			H	V	H	V	H	V
1000	0.016x	-	555.0	412.2	399.4	297.9	297.9	222.7
950	0.017x	-	527.7	391.9	379.8	283.2	283.2	211.7
900	0.018x	-	500.4	371.7	360.1	268.6	268.6	200.8
850	0.019x	-	473.1	351.4	340.5	253.9	253.9	189.8
800	0.020x	-	445.8	331.1	320.8	239.3	239.3	178.9
750	0.022x	-	418.6	310.8	301.2	224.6	224.6	167.9
700	0.023x	-	391.3	290.6	281.5	209.9	209.9	156.9
650	0.025x	-	364.0	270.3	261.9	195.3	195.3	146.0
600	0.027x	-	336.7	250.0	242.2	180.6	180.6	135.0
550	0.029x	-	309.4	229.7	222.6	166.0	166.0	124.1
500	0.032x	-	282.1	209.4	202.9	151.3	151.3	113.1
450	0.035x	-	254.8	189.2	183.3	136.7	136.7	102.2
400	0.040x	-	227.6	168.9	163.6	122.0	122.0	91.2
350	0.045x	-	200.3	148.6	144.0	107.4	107.4	80.2
300	0.052x	-	173.0	128.3	124.3	92.7	92.7	69.3
250	0.062x	-	145.7	108.1	104.7	78.0	78.0	58.3
200	0.076x	-	118.4	87.8	85.0	63.4	63.4	47.4