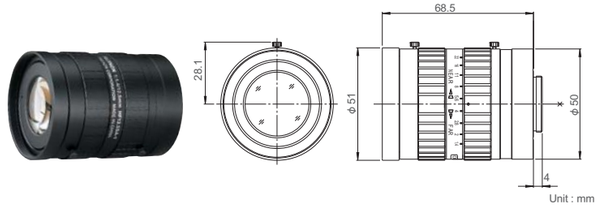
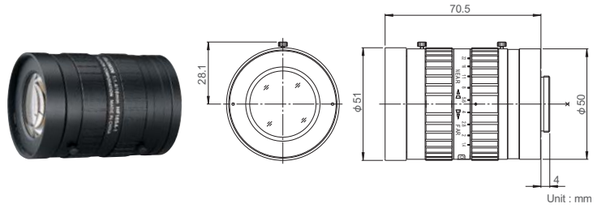
For FA/Machine Vision Fixed Focal

HF12.5SA-1



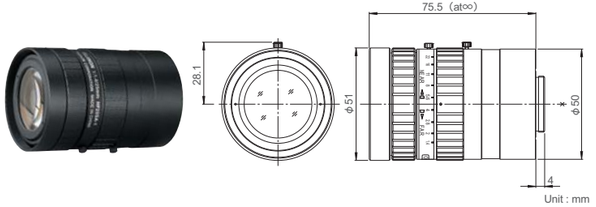
Unit : mm

HF16SA-1



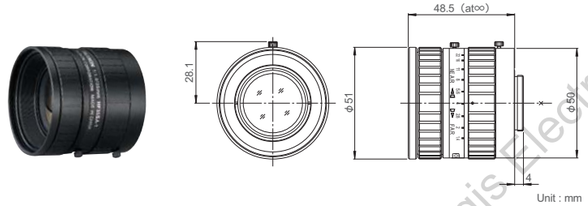
Unit : mm

HF25SA-1



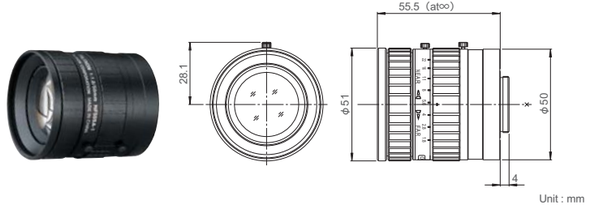
Unit : mm

HF35SA-1



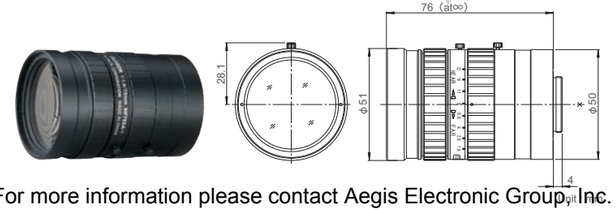
Unit : mm

HF50SA-1



Unit : mm

HF75SA-1



Unit : mm

Feature Indications

Aegis ELECTRONIC GROUP, INC

FIXED — **Fixed Focal**
High performance single focal lens for the best image quality

MANUAL — **Manual Iris**
Manually-operated iris

F1.4 — **Wide Aperture Rate**
Lens with the wide aperture rate, optimizing the sensitivity of cameras

5 Mega — **For Megapixel Camera**
For 5 Megapixel Camera

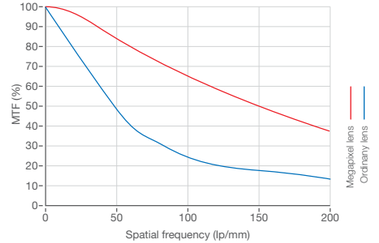
C-mt — **C Mount**
Screw-in mounting commonly used in FA lenses

METAL — **Metal Mount**
Metal mounting with high accuracy and durability

- ··· With locking knob for iris and focus
- ··· Using an extension tube longer than 5mm the M.O.D. will increase to 0.3m
- ··· Using an extension tube longer than 5mm the M.O.D. will increase to 0.5m

Megapixel Supporting Lens

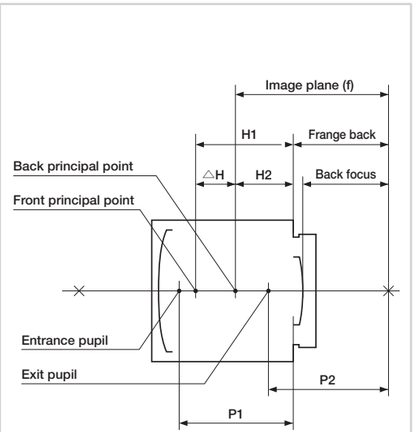
We have realized a high resolution, compact, and lightweight lens supporting to megapixel by thoroughly reducing aberrations based on design technology cultivated from broadcast TV lenses.
The chart shown at the right compares megapixel supporting lens and the MTF of an ordinary CCTV lens.
As the number of TV lines increases, the disparity in MTF becomes bigger.



		HF12.5SA-1	HF16SA-1	HF25SA-1	HF35SA-1	HF50SA-1	HF75SA-1
Focal Length (mm)		12.5	16	25	35	50	75
Iris Range		F1.4~F22	F1.4~F22	F1.4~F22	F1.4~F22	F1.8~F22	F1.8~F22
Operation	Focus	Manual	Manual	Manual	Manual	Manual	Manual
	Iris	Manual	Manual	Manual	Manual	Manual	Manual
Angle Of View (H×V)	2/3"	38°47' × 29°35'	30°45' × 23°18'	19°58' × 15°02'	14°20' × 10°46'	10°03' × 7°33'	6°43' × 5°02'
	1/2"	28°43' × 21°44'	22°37' × 17°04'	14°35' × 10°58'	10°27' × 7°51'	7°19' × 5°30'	4°53' × 3°40'
	1/3"	21°44' × 16°23'	17°04' × 12°50'	10°58' × 8°14'	7°51' × 5°53'	5°30' × 4°07'	3°40' × 2°45'
Focusing Range (From Front Of The Lens) (m)		∞ ~ 0.1	∞ ~ 0.1	∞ ~ 0.1	∞ ~ 0.2	∞ ~ 0.4	∞ ~ 0.9
Object Dimensions at M.O.D. (H×V) (mm)	2/3"	83 × 62	69 × 51	44 × 33	50 × 38	70 × 52	101 × 76
	1/2"	60 × 45	50 × 37	32 × 24	37 × 27	51 × 38	74 × 55
	1/3"	45 × 34	37 × 28	24 × 18	27 × 21	38 × 28	55 × 41
Back Focal Distance (in air) (mm)		16.07	17.99	22.32	14.99	17.81	24.43
Exit Pupil Position (From Image Plane) (mm)		-101	-172	-140	-37	-49	-52
Filter Thread (mm)		M49 × 0.75	M49 × 0.75	M49 × 0.75	M49 × 0.75	M49 × 0.75	M49 × 0.75
Mount		C	C	C	C	C	C
Mass (g)		295	285	315	185	240	305
Remarks		With Metal Mount	With Metal Mount	With Metal Mount	With Metal Mount	With Metal Mount	With Metal Mount

OPTICAL DATA (FA/Machine Vision LENS)

Sensor size	Product name	Focal Length	Aperture/Full open	Front principal point H_1 (from Mount)	Back principal point H_2 (from Mount)	Distance between the pincipal points △H	Entrance pupil position P_1 (from Mount)	Exit pupil position P_2 (from Image plane)	Back focal distance (in air)	Distortion	Relative illumination (Aperture: at full open. Image height: at diagonal)
1/2"	DF6HA-1B	6.15	1.2	-16.45	11.38	27.82	-21.8	-46	11.44	-1.93%	39
2/3"	HF9HA-1B	9.23	1.4	-12.91	8.30	21.21	-19.1	-28	13.48	-2.09%	32
	HF12.5HA-1B	12.88	1.4	-2.85	4.64	7.49	-10.3	-31	15.09	-2.01%	35
	HF16HA-1B	16.49	1.4	3.05	1.03	-2.02	-4.5	-30	15.15	-0.96%	35
	HF25HA-1B	25.81	1.4	1.82	-8.28	-10.10	-3.0	-32	14.58	-0.27%	46
	HF35HA-1B	34.99	1.6	-9.00	-17.47	-8.46	2.1	-27	15.00	0.03%	56
	HF50HA-1B	49.57	2.3	-42.64	-32.04	10.59	5.8	-25	15.25	0.04%	61
	HF75HA-1B	75.01	2.8	-100.77	-57.48	43.29	35.4	-27	15.75	0.27%	63
	HF12.5SA-1	12.83	1.4	-33.68	4.70	38.37	-44.9	-101	16.07	-0.30%	68
	HF16SA-1	16.33	1.4	-24.15	1.20	25.35	-38.9	-172	17.99	-0.08%	78
	HF25SA-1	24.00	1.4	-23.47	-6.47	17.00	-43.3	-139	22.32	-0.18%	72
	HF35SA-1	35.74	1.4	-1.27	-18.21	-16.94	-2.1	-37	14.99	-0.07%	62
	HF50SA-1	51.72	1.8	-1.87	-34.19	-32.32	0.5	-49	17.81	-0.03%	75
	HF75SA-1	74.97	1.8	-34.56	-57.45	-22.89	-2.2	-52	24.43	-0.03%	72
	HF35SR4A-SA1L	35.00	2.0	-19.33	-17.47	1.85	-37.8	-74	19.65	-0.02%	74
	HF50SR4A-SA1L	50.00	2.8	18.09	-32.47	-50.56	-26.7	-484	19.16	0.07%	80
1"	CF12.5HA-1	12.83	1.4	-33.68	4.70	38.37	-44.9	-101	16.07	0.17%	40
	CF16HA-1	16.33	1.4	-24.15	1.20	25.35	-38.9	-172	17.99	0.31%	34
	CF25HA-1	24.00	1.4	-23.47	-6.47	17.00	-43.3	-139	22.32	0.02%	39
	CF35HA-1	35.74	1.4	-1.27	-18.21	-16.94	-2.1	-37	14.99	-0.15%	43
	CF50HA-1	51.72	1.8	-1.87	-34.19	-32.32	0.5	-49	17.81	-0.06%	62
	CF75HA-1	74.97	1.8	-34.56	-57.45	-22.89	-2.2	-52	24.43	-0.06%	67
1/3" (3CCD)	TF2.8DA-8	2.86	2.2	-33.74	14.67	48.41	-36.7	101	14.51	-6.25%	51
	TF4DA-8	4.15	2.2	-28.46	13.37	41.83	-32.8	88	14.61	-3.78%	53
	TF8DA-8B	8.23	2.2	-10.81	9.30	20.10	-18.6	-178	14.83	-1.32%	30
	TF15DA-8	15.26	2.2	-0.33	2.27	2.60	-12.9	-89	16.32	-0.33%	34
	TF25DA-8B	24.94	2.2	14.49	-7.42	-21.91	-5.1	-120	15.12	-0.12%	30
Fish-Eye	FE185C046HA-1	1.43	1.4	-38.26	16.10	54.36	-39.7	-227	9.70	-0.47% ※	75
	FE185C057HA-1	1.78	1.4	-37.55	15.75	53.30	-39.3	-66	9.70	-0.80% ※	74
	FE185C086HA-1	2.68	1.8	-35.00	14.85	49.85	-37.5	-41	9.75	-0.53% ※	84



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