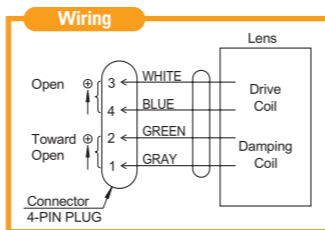
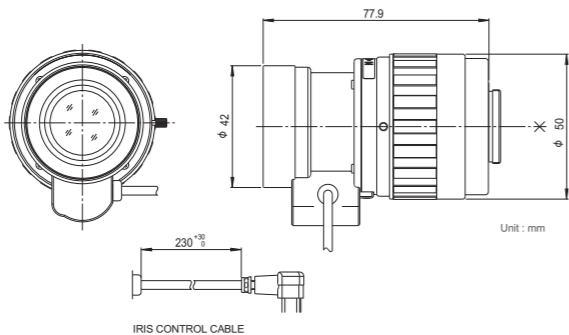


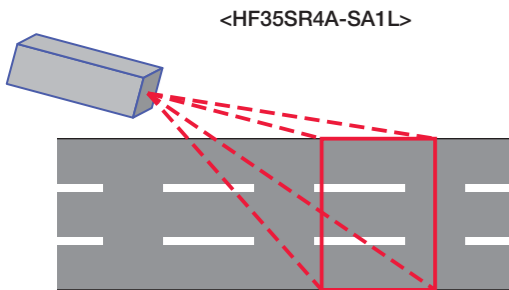
# For Security Fixed Focal

HF35SR4A-SA1L / HF50SR4A-SA1L

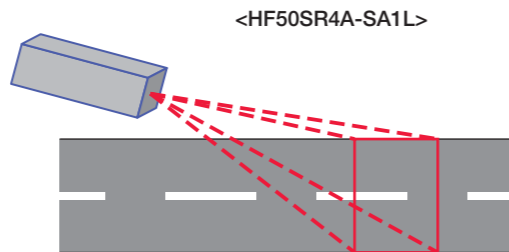


## Design for ITS use

2 types for the different road condition



	H (m) × V (m)
10.0 (m)	2.7 × 1.5
50.0 (m)	13.7 × 7.7
100.0 (m)	27.4 × 15.4



	H (m) × V (m)
10.0 (m)	1.9 × 1.1
50.0 (m)	9.6 × 5.4
100.0 (m)	19.2 × 10.8

## Feature Indications

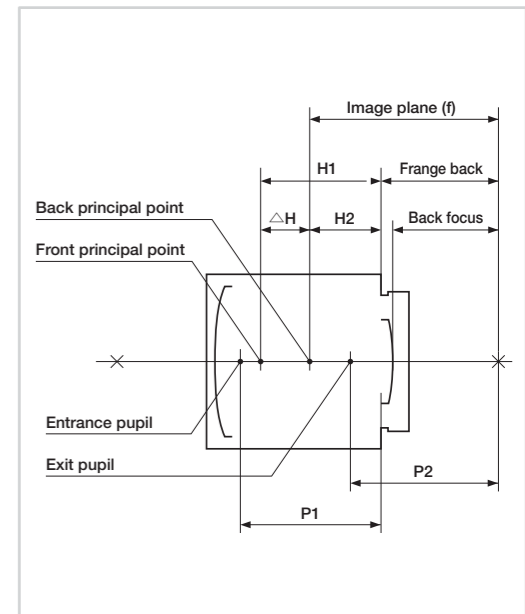
- FIXED** Fixed Focal: High performance single focal lens for the best image quality
- 5 Mega** For Megapixel Camera: For 5 Megapixel Camera
- Day~Night** Day & Night: Specially-designed lens supporting both visible light and near-infrared light to prevent out-of-focus of day & night cameras
- DC** DC Auto Iris: Auto iris supporting DC-controlled cameras
- C-mt** C Mount: Screw-in mounting commonly used in FA lenses
- METAL** Metal Mount: Metal mounting with high accuracy and durability
- N D** ND Filter: With the built-in ND filter, enables to optimize the brightness of the bright object in direct sunlight
- RoHS** RoHS Compliant

	HF35SR4A-SA1L	HF50SR4A-SA1L
Focal Length (mm)	35	50
Iris Range	F2.0~T360	F2.8~T360
Operation	Manual	Manual
	Focus	Auto (DC Type) (*1)
	Iris	Auto (DC Type) (*1)
Angle Of View (H×V)	2/3"	14°20' × 10°46'
	1/2"	10°27' × 7°51'
	1/3"	7°51' × 5°53'
Angle Of View (H×V) 16:9	2/3"	15°36' × 8°48'
	1/2"	11°22' × 6°25'
	1/3"	8°33' × 4°49'
Focusing Range (From Front Of The Lens) (m)	∞ ~ 0.75	∞ ~ 1.0
Object Dimensions at M.O.D. (H×V) (mm) 4:3	2/3"	191 × 143
	1/2"	139 × 104
	1/3"	104 × 78
Object Dimensions at M.O.D. (H×V) (mm) 16:9	2/3"	208 × 117
	1/2"	151 × 85
	1/3"	114 × 64
Back Focal Distance (in air) (mm)	19.65	19.16
Exit Pupil Position (From Image Plane) (mm)	-75	599
Filter Thread (mm)	M40.5 × 0.5	M40.5 × 0.5
Mount	C	C
Mass (g)	270	260
Coil Resistance	Drive Coil	190Ω
	Damping Coil	1,150Ω
Current Consumption	23mA (Max.) at DC 4V	
Remarks	With Metal Mount (*1) When power is turned off, iris will automatically close.	

# OPTICAL DATA (FA/Machine Vision LENS)

Sensor size	Product name	Focal Length	Aperture/Full open	Front principal point H1 (from Mount)	Back principal point H2 (from Mount)	Distance between the principal points ΔH
1/2"	DF6HA-1B	6.15	1.2	-16.45	11.38	27.82
	HF9HA-1B	9.23	1.4	-12.91	8.30	21.21
	HF12.5HA-1B	12.88	1.4	-2.85	4.64	7.49
	HF16HA-1B	16.49	1.4	3.05	1.03	-2.02
	HF25HA-1B	25.81	1.4	1.82	-8.28	-10.10
	HF35HA-1B	34.99	1.6	-9.00	-17.47	-8.46
2/3"	HF50HA-1B	49.57	2.3	-42.64	-32.04	10.59
	HF75HA-1B	75.01	2.8	-100.77	-57.48	43.29
	HF12.5SA-1	12.83	1.4	-33.68	4.70	38.37
	HF16SA-1	16.33	1.4	-24.15	1.20	25.35
	HF25SA-1	24.00	1.4	-23.47	-6.47	17.00
	HF35SA-1	35.74	1.4	-1.27	-18.21	-16.94
	HF50SA-1	51.72	1.8	-1.87	-34.19	-32.32
	HF75SA-1	74.97	1.8	-34.56	-57.45	-22.89
	HF35SR4A-SA1L	35.00	2.0	-19.33	-17.47	1.85
	HF50SR4A-SA1L	50.00	2.8	18.09	-32.47	-50.56
	1"	CF12.5HA-1	12.83	1.4	-33.68	4.70
CF16HA-1		16.33	1.4	-24.15	1.20	25.35
CF25HA-1		24.00	1.4	-23.47	-6.47	17.00
CF35HA-1		35.74	1.4	-1.27	-18.21	-16.94
CF50HA-1		51.72	1.8	-1.87	-34.19	-32.32
CF75HA-1		74.97	1.8	-34.56	-57.45	-22.89
1/3" (3CCD)	TF2.8DA-8	2.86	2.2	-33.74	14.67	48.41
	TF4DA-8	4.15	2.2	-28.46	13.37	41.83
	TF8DA-8B	8.23	2.2	-10.81	9.30	20.10
	TF15DA-8	15.26	2.2	-0.33	2.27	2.60
	TF25DA-8B	24.94	2.2	14.49	-7.42	-21.91
Fish-Eye	FE185C046HA-1	1.43	1.4	-38.26	16.10	54.36
	FE185C057HA-1	1.78	1.4	-37.55	15.75	53.30
	FE185C086HA-1	2.68	1.8	-35.00	14.85	49.85

Entrance pupil position P1 (from Mount)	Exit pupil position P2 (from Image plane)	Back focal distance (in air)	Distortion	Relative illumination (Aperture: at full open. Image height: at diagonal)
-21.8	-46	11.44	-1.93%	39
-19.1	-28	13.48	-2.09%	32
-10.3	-31	15.09	-2.01%	35
-4.5	-30	15.15	-0.96%	35
-3.0	-32	14.58	-0.27%	46
2.1	-27	15.00	0.03%	56
5.8	-25	15.25	0.04%	61
35.4	-27	15.75	0.27%	63
-44.9	-101	16.07	-0.30%	68
-38.9	-172	17.99	-0.08%	78
-43.3	-139	22.32	-0.18%	72
-2.1	-37	14.99	-0.07%	62
0.5	-49	17.81	-0.03%	75
-2.2	-52	24.43	-0.03%	72
-37.8	-74	19.65	-0.02%	74
-26.7	-484	19.16	0.07%	80
-44.9	-101	16.07	0.17%	40
-38.9	-172	17.99	0.31%	34
-43.3	-139	22.32	0.02%	39
-2.1	-37	14.99	-0.15%	43
0.5	-49	17.81	-0.06%	62
-2.2	-52	24.43	-0.06%	67
-36.7	101	14.51	-6.25%	51
-32.8	88	14.61	-3.78%	53
-18.6	-178	14.83	-1.32%	30
-12.9	-89	16.32	-0.33%	34
-5.1	-120	15.12	-0.12%	30
-39.7	-227	9.70	-0.47% ※	75
-39.3	-66	9.70	-0.80% ※	74
-37.5	-41	9.75	-0.53% ※	84



※ $y=f\theta$