

FUJINON CCTV LENSES

for Security & Surveillance



HD Vari-Focal



HD Fixed Focal



HD Fish-Eye



Vari-Focal



Zoom

FUJINON CCTV LENSES

FUJINON lenses have dominated the broadcasting lens market where excellent image quality is required. The technologies for those broadcasting lenses are now adopted in CCTV lens manufacturing. We offer various lenses for a wide range of purposes including large super zoom lenses suitable for long range surveillance, day and night lenses, and HD lenses. We always make great effort to produce reliable products for customers all over the world through our strictest quality control and streamlined production structure.

See what it is, not what it might be. FUJINON CCTV LENSES

Features



Fish-Eye Lenses

Fujinon's Fish-Eye lens, with an angle of 185 degrees, is the world's first to support 5 megapixel CCD cameras. High-quality image display in imaging software has been made simple with captured images that are sharp from edge to edge, and with the adoption of the F θ system suited for uniform displaying of images. Look no further for effective, blindspot-free wide-area surveillance, such as of subway entrances and shopping arcades.

Fixed Focal Length Lenses



High cost-performance fixed focal length lenses that are compact, lightweight and of course provide high quality images for security CCTV cameras. Great lineups including day-and-night use lenses supporting 5-megapixel cameras, which are optimum for ITS in growing demand. These lenses are highly effective wherever security monitoring is required, including bank ATMs, convenience stores, offices, condominiums and transportation facilities.



HD Vari-Focal Lenses

High-resolution lenses for use in security systems for which demand has grown in recent years. These lenses boast super clear imaging from the center to the edges with superior face recognition capability. The lenses are suitable for any purpose and locale, in day and night use, from among focal lengths of 2.2 mm to 80 mm.



Vari-Focal Lenses

Lenses for use in security systems for which demand has grown in recent years. These lenses allow clear imaging from the center to the edges with superior face recognition capability. They are suitable for any purpose and locale. The lenses are featured by: an AT aspheric surface, large aperture of F0.95, day and night use, miniature design for dome application or coverage for 1/2-inch sensors superior in terms of optical performance.



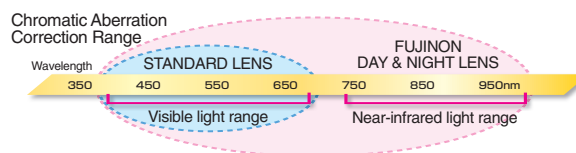
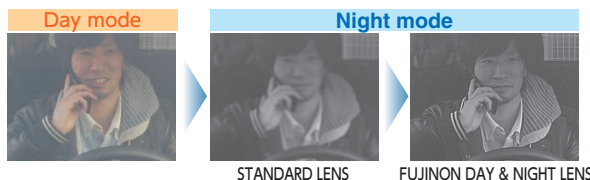
Zoom Lenses

With the adoption of high-precision TRI-CAM + INNERCAM technology, we offer an expanded lineup of products to meet ever more diversified needs. There are models with auto-focusing, optical anti-vibration, zoom and focus presetting, and also those which support the RS-232C standard that enable sophisticated zoom control by computer. We are expanding the lineup with lenses for night vision cameras and lenses with super zoom (eg: 60x), long focal length (eg: 3200 mm) or high resolution (eg: 2 megapixels) demanded for long range surveillance. Small and lightweight lenses enable compact long range surveillance systems to be built.



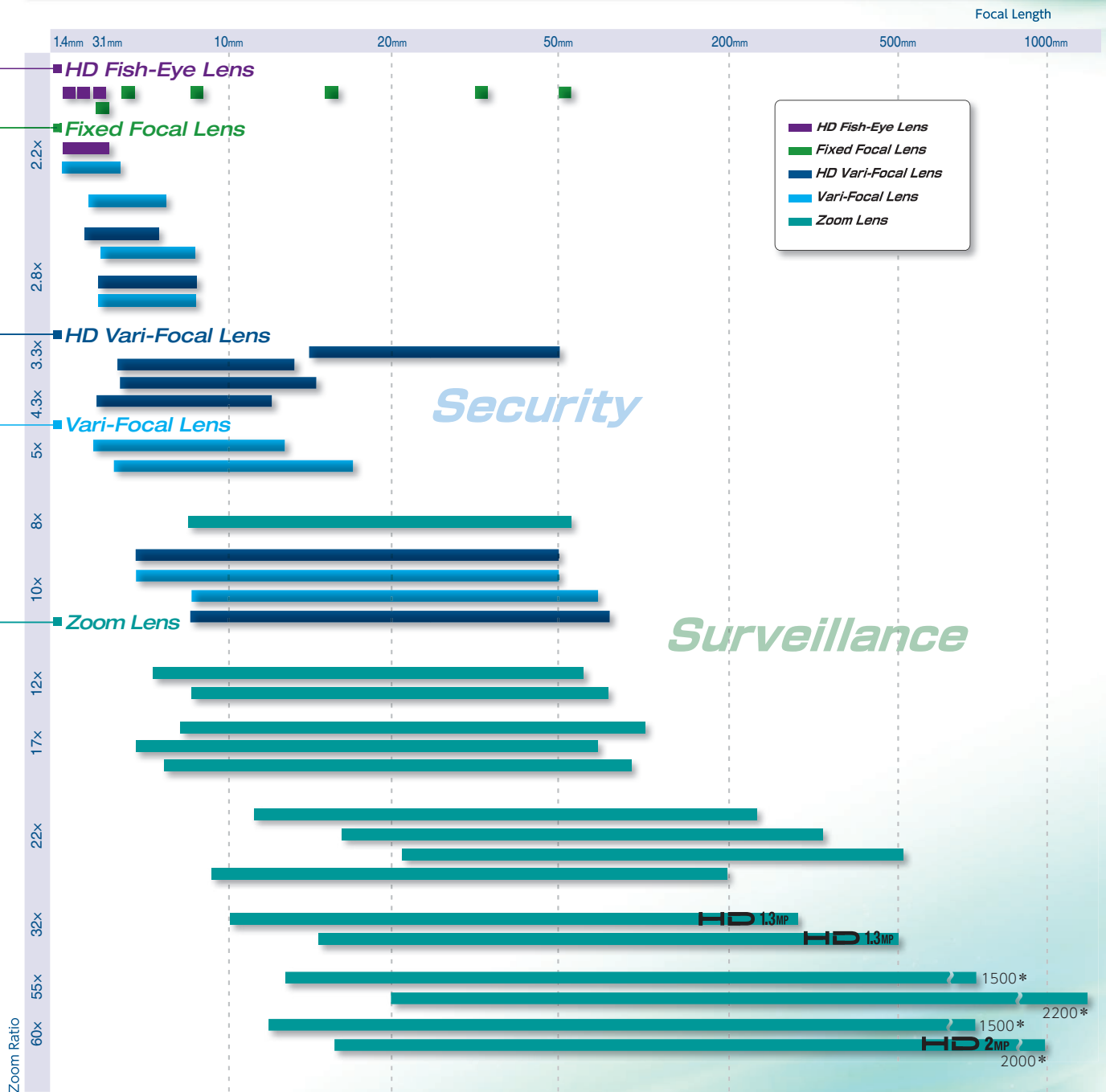
Day&Night Lenses

There is a growing need for compact, high quality lenses for 24/7 surveillance applications such as parking lots, factory premises, streets. Continuous surveillance is also required for public facilities such as airports, harbors, highways and border patrol, requiring more versatile focal lengths and higher zoom ratios. Fujinon has developed lenses that respond to infrared illumination to capture clear, corrected images, even at 0 lux. We offer a lineup of lenses from the standard focal length of 2.9-8 mm, to the diverse focal length of 12.5-2200 mm.



At night, day & night cameras operate in the near-infrared range. For this reason, use of regular lenses causes the image to be out of focus. Using special optical glass and advanced optical designing technology, Fujinon's day&night lenses achieve minimal axial aberration. Sharp and high quality images can be captured around-the-clock, whether in the visible range (day / color) or in the near-infrared range (night / monochrome), and at every focal distance from the wide end to the tele end.

Focal Length



*Focal length will be 2x when extender is used.

FUJINON HD Lenses

As modern industries and social infrastructures are growing rapidly, demands for surveillance systems incorporating high-definition cameras are increasing day by day. In order to fully utilize advanced complex security systems, superior lens performance for image capture is essential.

To respond to this market demand, Fujifilm offers a wide variety of high quality lenses for HD security cameras, achieving clear images for superior face recognition capability.

Suitable for any application and condition, our lineup contains Day and Night, and other lenses ranging from 2.2 mm to 3200 mm.

FUJINON HD Vari-Focal lenses can be incorporated with the P-iris control, a precise control of the iris (by using a stepping motor) according to the situation, to produce higher quality video images. (*1)(*2)



**High-vision
surveillance images!**

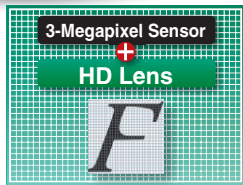


Image captured by HD lens for 3-megapixel sensor

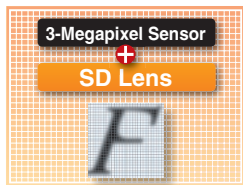
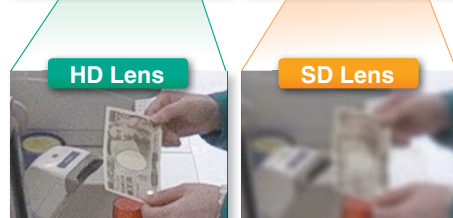


Image captured by SD lens

* The above are simulated images of those captured by HD lens/SD lens and 3-megapixel sensor.

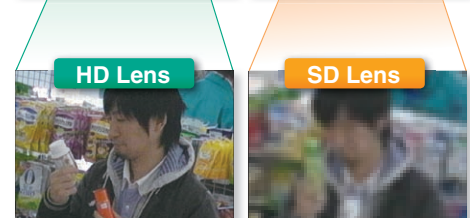
Lenses supporting 1.3- to 5-megapixel HD sensors provide 2 to 4 times greater resolution, compared to traditional lenses for SD sensors. Only when used in combination with these lenses, cameras with greater pixel sizes and image quality allowed to fully exercise their performance.

• **Over Cash Register**



Details on banknotes or cash display are clearly seen.

• **In Store**



Facial expressions or details of clothing can be easily seen in images taken by HD lenses.

* 1: The P-iris is an optional feature. Contact us separately to incorporate it.
* 2: P-iris lenses are only available with the cameras supporting P-iris control.

FUJINON

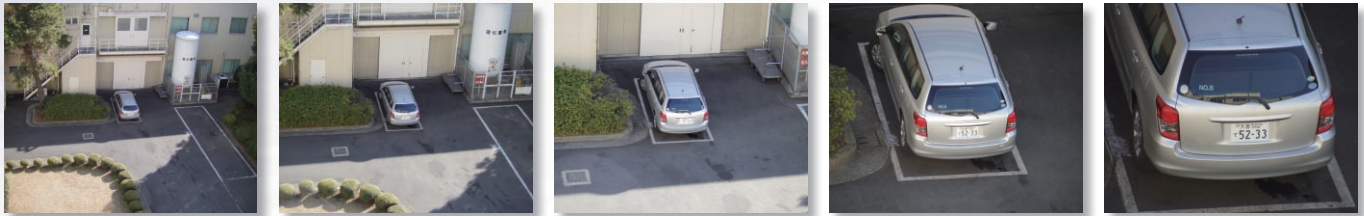
Chart of Focus Range for HD Vari-Focal Lenses.



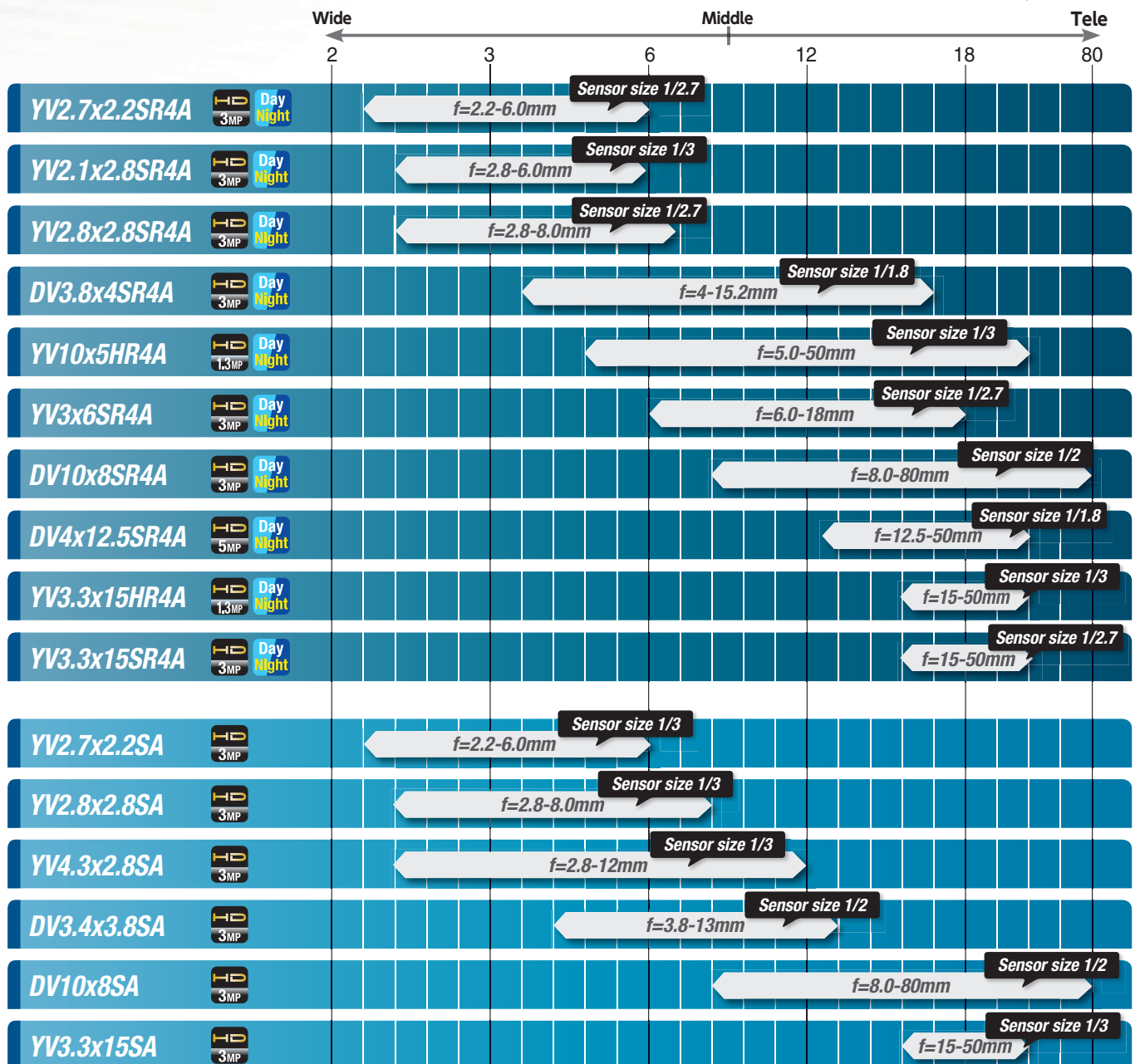
Wide

Middle

Tele



*Shots taken by DV10x8SR4A



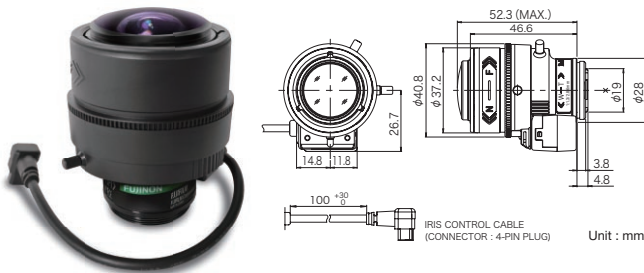
HD Vari-Focal Day&Night Lens

Day
Night

YV2.1x2.8SR4A-SA2

2.1x

Applicable camera (model) 1 2/3 1/2 1/3 1/4



Unit : mm

Vari-Focal Wide Angle DC Auto Iris CS Mount Metal Mount ND Filter Long Cable Aspherical Lens Large Aperture Ratio RoHS Compliant
VARI WIDE DC CS-mt METAL ND 230 AT F1.3 RoHS

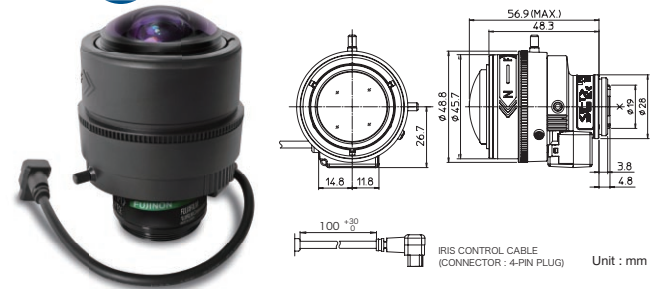
HD
3MP

YV2.7x2.2SR4A-SA2

2.7x

Applicable to 1/2.7

Applicable camera (model) 1 2/3 1/2 1/2.7 1/3 1/4



Unit : mm

Vari-Focal Wide Angle DC Auto Iris CS Mount Metal Mount ND Filter Long Cable Aspherical Lens Large Aperture Ratio RoHS Compliant
VARI WIDE DC CS-mt METAL ND 230 AT F1.3 RoHS

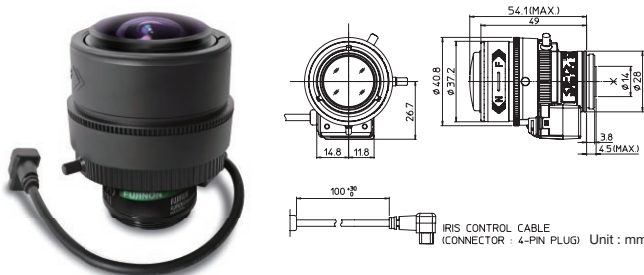
HD
3MP

YV2.8x2.8SR4A-SA2

2.8x

Applicable to 1/2.7

Applicable camera (model) 1 2/3 1/2 1/2.7 1/3 1/4



Unit : mm

Vari-Focal Wide Angle DC Auto Iris CS Mount Metal Mount ND Filter Long Cable Aspherical Lens Large Aperture Ratio RoHS Compliant
VARI WIDE DC CS-mt METAL ND 230 AT F1.3 RoHS

HD
3MP

YV3x6SR4A-SA2

NEW

3x

Applicable to 1/2.7

Applicable camera (model) 1 2/3 1/2 1/2.7 1/3 1/4



Unit : mm

Vari-Focal DC Auto Iris CS Mount Metal Mount ND Filter Long Cable Aspherical Lens Large Aperture Ratio RoHS Compliant
VARI DC CS-mt METAL ND 230 AT F1.4 RoHS

HD
3MP

	Applicable to 1/3		Applicable to 1/2.7		Applicable to 1/2.7		Applicable to 1/2.7	
	YV2.1x2.8SR4A-SA2		YV2.7x2.2SR4A-SA2		YV2.8x2.8SR4A-SA2		YV3x6SR4A-SA2	
Focal Length (mm)	2.8 - 6 (2.1x)		2.2 - 6 (2.7x)		2.8 - 8 (2.8x)		6 - 18 (3x)	
Iris Range	F1.3 - T360 (Equivalent to F360)				F1.3 - T360		F1.4 - T360	
Operation	Zoom							
	Focus	Manual						
Angle of View (H x V)	1/2.7"	WIDE	132° 47' x 100° 19'		112° 24' x 81° 16'		51° 5' x 37° 50'	
		TELE	50° 26' x 37° 54'		38° 48' x 29° 05'		16° 60' x 12° 45'	
Aspect Ratio 16:9	1/3"	WIDE	101° 11' x 74° 10'		100° 34' x 73° 22'		46° 13' x 34° 18'	
		TELE	46° 58' x 35° 09'		35° 16' x 26° 26'		15° 27' x 11° 36'	
	1/4"	WIDE	74° 10' x 54° 58'		73° 22' x 54° 18'		34° 18' x 25° 35'	
		TELE	35° 09' x 26° 19'		26° 26' x 19° 49'		11° 36' x 8° 42'	
Angle of View (H x V) Aspect Ratio 16:9	1/2.7"	WIDE	144° 08' x 82° 08'		124° 51' x 65° 26'		55° 56' x 30° 48'	
		TELE	54° 48' x 30° 57'		42° 17' x 23° 43'		18° 30' x 10° 26'	
	1/3"	WIDE	111° 25' x 60° 03'		111° 8' x 59° 19'		50° 35' x 27° 54'	
		TELE	51° 13' x 28° 41'		38° 27' x 21° 35'		16° 50' x 9° 28'	
1/4"	WIDE	81° 14' x 44° 41'		80° 23' x 44° 13'		37° 27' x 20° 53'		
	TELE	38° 18' x 21° 30'		37° 31' x 21° 12'		28° 47' x 16° 13'		
Focus Range (From the Lens Front) (m)					∞ - 0.3			
Mass (g)	55		75		60		95	

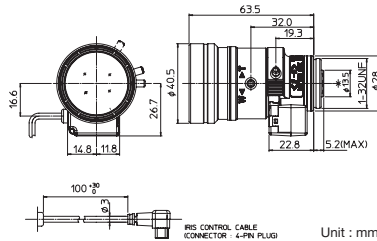
* 1: The iris automatically closes when the camera is turned off.
 ※ Each of the above products is also available in a manual type.
 ※ Each of the above products is also available in a long cable type (230 mm).

YV3.3x15SR4A-SA2

NEW

3.3 x Applicable to 1/2.7

Applicable camera (model) 1 2/3 1/2.7 1/3 1/4



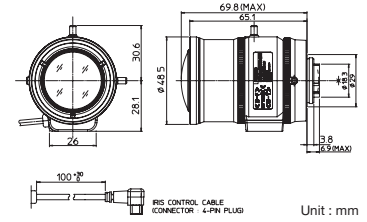
Unit : mm

Vari-Focal **VARI** Telephoto Long Focal **TELE** DC Auto Iris **DC** CS Mount **CS-mt** Metal Mount **METAL** ND Filter **ND** Long Cable **C230** Aspherical Lens **AT** Large Aperture Ratio **F1.5** RoHS Compliant **RoHS** **HD 3MP**

DV3.8x4SR4A-SA1

3.8 x Applicable to 1/1.8

Applicable camera (model) 1 2/3 1/1.8 1/2 1/3 1/4



Unit : mm

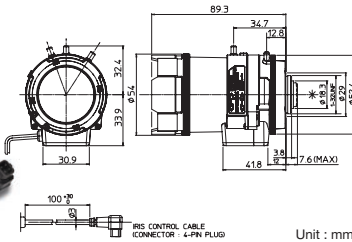
Vari-Focal **VARI** Wide Angle **WIDE** DC Auto Iris **DC** C Mount **C-mt** Metal Mount **METAL** ND Filter **ND** Long Cable **C230** Aspherical Lens **AT** Large Aperture Ratio **F1.5** RoHS Compliant **RoHS** **HD 3MP**

DV4x12.5SR4A-SA1

NEW

4 x Applicable to 1/1.8

Applicable camera (model) 1 2/3 1/1.8 1/2 1/3 1/4



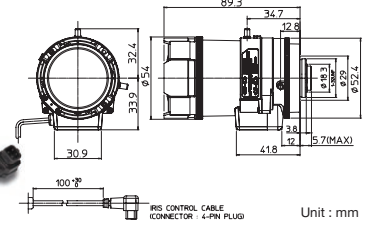
Unit : mm

Vari-Focal **VARI** Telephoto Long Focal **TELE** DC Auto Iris **DC** C Mount **C-mt** Metal Mount **METAL** ND Filter **ND** Long Cable **C230** Aspherical Lens **AT** Large Aperture Ratio **F1.6** RoHS Compliant **RoHS** **HD 5MP**

DV10x8SR4A-SA1

10 x

Applicable camera (model) 1 2/3 1/2 1/3 1/4



Unit : mm

Vari-Focal **VARI** Telephoto Long Focal **TELE** DC Auto Iris **DC** C Mount **C-mt** Metal Mount **METAL** ND Filter **ND** Long Cable **C230** Aspherical Lens **AT** Large Aperture Ratio **F1.6** RoHS Compliant **RoHS** **HD 3MP**

		Applicable to 1/2.7		Applicable to 1/1.8		Applicable to 1/1.8		Applicable to 1/2	
		YV3.3x15SR4A-SA2		DV3.8x4SR4A-SA1		DV4x12.5SR4A-SA1		DV10x8SR4A-SA1	
Focal Length (mm)		15 - 50 (3.3x)		4 - 15.2 (3.8x)		12.5 - 50 (4x)		8 - 80 (10x)	
Iris Range		F1.5 - T360		F1.5 - T360		F1.6 - T360		F1.6 - T360 (Equivalent to F360)	
Operation	Zoom	Manual							
	Focus	Manual							
		Auto (DC type)*1							
Angle of View (H × V)	1/1.8"	WIDE	—	103° 27' × 77° 03'	32° 54' × 24° 37'	—	—	—	—
		TELE	—	27° 23' × 20° 34'	8° 14' × 6° 13'	—	—	—	—
	1/2"	WIDE	20° 1' × 15° 5' *2	92° 42' × 69° 08'	29° 32' × 22° 7'	44° 33' × 34° 58'	—	—	—
		TELE	6° 9' × 4° 39' *2	24° 38' × 18° 29'	7° 26' × 5° 36'	4° 42' × 3° 32'	—	—	—
	1/3"	WIDE	18° 14' × 13° 43'	69° 08' × 51° 40'	22° 7' × 16° 34'	34° 58' × 26° 35'	—	—	—
		TELE	5° 37' × 4° 14'	18° 29' × 13° 53'	5° 36' × 4° 12'	3° 32' × 2° 39'	—	—	—
	1/4"	WIDE	13° 43' × 10° 18'	51° 40' × 38° 41'	—	22° 40' × 17° 06'	—	—	—
		TELE	4° 14' × 3° 11'	13° 53' × 10° 25'	—	2° 22' × 1° 47'	—	—	—
Angle of View (H × V) Aspect Ratio 16:9	1/1.8"	WIDE	—	113° 02' × 62° 46'	35° 52' × 20° 6'	—	—	—	—
		TELE	—	29° 48' × 16° 49'	8° 57' × 5° 5'	—	—	—	—
	1/2"	WIDE	21° 45' × 12° 20' *2	101° 14' × 56° 21'	32° 12' × 18° 3'	49° 39' × 29° 10'	—	—	—
		TELE	6° 41' × 3° 49' *2	26° 49' × 15° 07'	8° 4' × 4° 35'	5° 07' × 2° 53'	—	—	—
	1/3"	WIDE	19° 49' × 11° 14'	75° 25' × 42° 09'	24° 6' × 13° 32'	38° 16' × 22° 05'	—	—	—
		TELE	6° 6' × 3° 28'	20° 08' × 11° 21'	6° 5' × 3° 27'	3° 50' × 2° 09'	—	—	—
	1/4"	WIDE	14° 56' × 8° 26'	56° 21' × 31° 34'	—	24° 42' × 14° 03'	—	—	—
		TELE	4° 36' × 2° 36'	15° 07' × 8° 31'	—	2° 35' × 1° 27'	—	—	—
Focus Range (From the Lens Front) (m)		∞ - 1.0		∞ - 0.3		∞ - 0.8		∞ - 1.5	
Mass (g)		80		120		175		180	

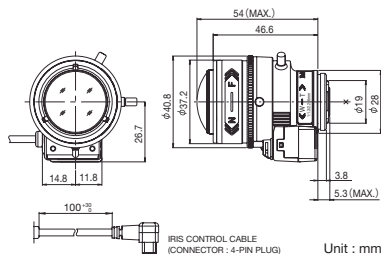
*1: The iris automatically closes when the camera is turned off.
 *2: Angle of view values for the 1/2.7 model.
 ※ Each of the above products is also available in manual type.
 ※ Each of the above products is also available in long cable type (230 mm).

HD Vari-Focal

YV2.7x2.2SA-SA2

2.7x

Applicable camera (model) 1 2/3 1/2 1/3 1/4



Unit : mm

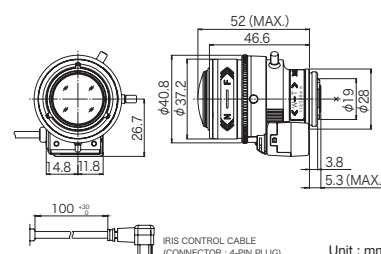
Vari-Focal Wide Angle DC Auto Iris CS Mount Metal Mount ND Filter Long Cable Aspherical Lens Large Aperture Ratio RoHS Compliant
VARI WIDE DC CS-mt METAL ND 230 AT F1.3 RoHS

HD
3MP

YV2.8x2.8SA-SA2

2.8x

Applicable camera (model) 1 2/3 1/2 1/3 1/4



Unit : mm

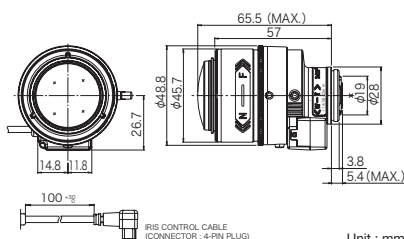
Vari-Focal Wide Angle DC Auto Iris CS Mount Metal Mount ND Filter Long Cable Aspherical Lens Large Aperture Ratio RoHS Compliant
VARI WIDE DC CS-mt METAL ND 230 AT F1.2 RoHS

HD
3MP

YV4.3x2.8SA-SA2

4.3x

Applicable camera (model) 1 2/3 1/2 1/3 1/4



Unit : mm

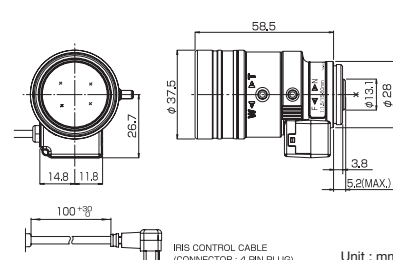
Vari-Focal Wide Angle Long Focal DC Auto Iris CS Mount Metal Mount ND Filter Long Cable Aspherical Lens Large Aperture Ratio RoHS Compliant
VARI WIDE TELE DC CS-mt METAL ND 230 AT F1.4 RoHS

HD
3MP

YV3.3x15SA-SA2

3.3x

Applicable camera (model) 1 2/3 1/2 1/3 1/4



Unit : mm

Vari-Focal Long Focal DC Auto Iris CS Mount Metal Mount ND Filter Long Cable Aspherical Lens Large Aperture Ratio RoHS Compliant
VARI TELE DC CS-mt METAL ND 230 AT F1.5 RoHS

HD
3MP

	Applicable to 1/3		Applicable to 1/3		Applicable to 1/3		Applicable to 1/3	
	YV2.7x2.2SA-SA2		YV2.8x2.8SA-SA2		YV4.3x2.8SA-SA2		YV3.3x15SA-SA2	
Focal Length (mm)	2.2 - 6 (2.7x)		2.8 - 8 (2.8x)		2.8 - 12 (4.3x)		15 - 50 (3.3x)	
Iris Range	F1.3 - T360(Equivalent to F360)		F1.2 - T360(Equivalent to F360)		F1.4 - T360(Equivalent to F360)		F1.5 - T360(Equivalent to F360)	
Operation	Zoom	Manual						
	Focus	Manual						
		Auto (DC type)*1						
Angle of View (H x V)	1/3"	WIDE	120° 00' x 91° 36'	100° 00' x 73° 45'	100° 02' x 74° 03'	18° 08' x 13° 34'		
		TELE	46° 26' x 34° 59'	35° 03' x 26° 18'	23° 26' x 17° 36'	5° 35' x 4° 12'		
	1/4"	WIDE	91° 36' x 69° 21'	73° 45' x 54° 49'	74° 03' x 55° 06'	13° 34' x 10° 10'		
		TELE	34° 59' x 26° 18'	26° 18' x 19° 44'	17° 36' x 13° 13'	4° 12' x 3° 10'		
Angle of View (H x V)	1/3"	WIDE	129° 43' x 75° 23'	109° 50' x 59° 51'	109° 33' x 60° 08'	19° 46' x 11° 04'		
		TELE	50° 30' x 28° 38'	38° 11' x 21° 29'	25° 31' x 14° 23'	6° 04' x 3° 26'		
	1/4"	WIDE	99° 23' x 56° 53'	80° 39' x 44° 38'	80° 56' x 44° 51'	14° 47' x 8° 18'		
		TELE	38° 04' x 21° 31'	28° 39' x 16° 07'	19° 10' x 10° 48'	4° 34' x 2° 35'		
Focus Range (From the Lens Front) (m)	∞ - 0.3		∞ - 0.3		∞ - 0.3		∞ - 0.8	
Mass (g)	55		50		80		60	

* 1 : The iris automatically closes when the camera is turned off.

※ Each of the above products is also available in manual type.

※ Each of the above products is also available in long cable type (230 mm).

DV3.4x3.8SA-SA1

3.4 x

Applicable camera (model) 1 2/3 1/2 1/3 1/4

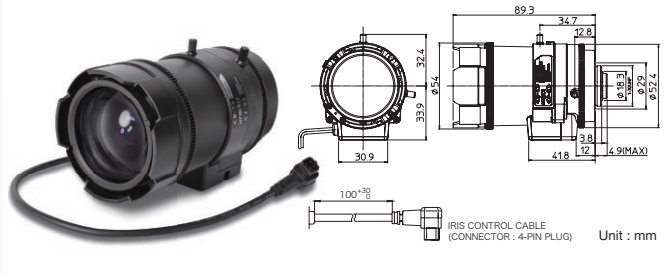


Vari-Focal Wide Angle Telephoto Long Focal DC Auto Iris C Mount Metal Mount ND Filter Long Cable Aspherical Lens Large Aperture Ratio RoHS Compliant **HD** VARI WIDE TELE DC C-mt METAL ND AT F1.4 RoHS 3MP

DV10x8SA-SA1

10 x

Applicable camera (model) 1 2/3 1/2 1/3 1/4



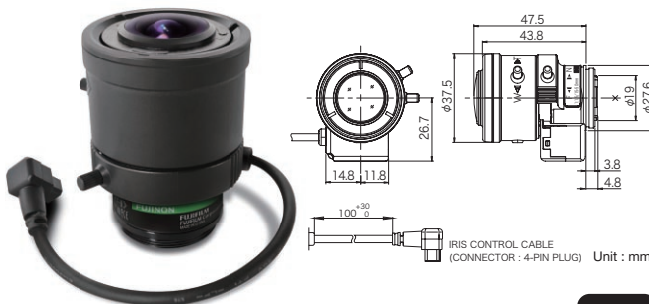
Vari-Focal Telephoto Long Focal DC Auto Iris C Mount Metal Mount ND Filter Long Cable Aspherical Lens Large Aperture Ratio RoHS Compliant **HD** VARI TELE DC C-mt METAL ND AT F1.4 RoHS 3MP

HD Vari-Focal Day&Night Lens

YV3.3x15HR4A-SA2

3.3 x

Applicable camera (model) 1 2/3 1/2 1/3 1/4

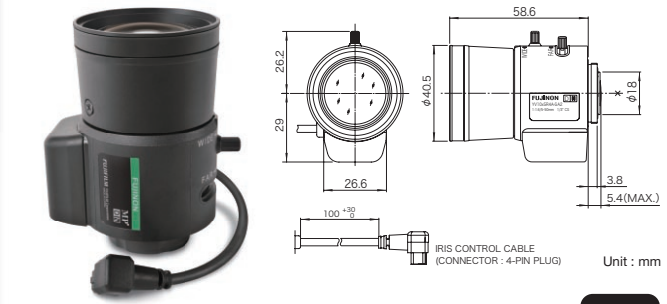


Vari-Focal Long Focal DC Auto Iris CS Mount Metal Mount ND Filter Aspherical Lens Large Aperture Ratio RoHS Compliant **HD** VARI TELE DC CS-mt METAL ND AT F1.5 RoHS 1.3MP

YV10x5HR4A-SA2

10 x

Applicable camera (model) 1 2/3 1/2 1/3 1/4

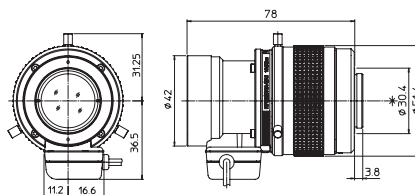


Vari-Focal Wide Angle Telephoto Long Focal DC Auto Iris CS Mount Metal Mount ND Filter Long Cable Aspherical Lens Large Aperture Ratio RoHS Compliant **HD** VARI WIDE TELE DC CS-mt METAL ND AT F1.6 RoHS 1.3MP

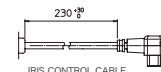
	Applicable to 1/2		Applicable to 1/2		Applicable to 1/3		Applicable to 1/3		
	DV3.4x3.8SA-SA1		DV10x8SA-SA1		YV3.3x15HR4A-SA2		YV10x5HR4A-SA2		
Focal Length (mm)	3.8 - 13 (3.4x)		8 - 80 (10x)		15 - 50 (3.3x)		5 - 50 (10x)		
Iris Range	F1.4 - T360(Equivalent to F360)								
Operation	Zoom		Manual						
	Focus		Manual						
Angle of View (H x V)	1/2"	WIDE	97° 34' x 71° 47'		44° 21' x 33° 25'		-		
		TELE	28° 23' x 21° 18'		4° 38' x 3° 30'		-		
		1/3"	WIDE	71° 47' x 53° 15'		33° 25' x 25° 06'		18° 29' x 13° 45'	
			TELE	21° 18' x 15° 59'		3° 30' x 2° 38'		5° 29' x 4° 09'	
	1/4"	WIDE	53° 15' x 39° 41'		25° 06' x 18° 51'		13° 45' x 10° 16'		
		TELE	15° 59' x 11° 59'		2° 38' x 1° 59'		4° 09' x 3° 08'		
	Angle of View (H x V) Aspect Ratio 16:9	1/2"	WIDE	107° 12' x 58° 10'		48° 12' x 27° 21'		-	
			TELE	30° 55' x 17° 25'		2° 52' x 5° 02'		-	
1/3"		WIDE	78° 34' x 43° 18'		36° 22' x 20° 32'		20° 13' x 11° 11'		
		TELE	23° 12' x 13° 04'		3° 48' x 2° 09'		5° 57' x 3° 25'		
1/4"	WIDE	58° 10' x 32° 20'		27° 21' x 15° 24'		15° 0' x 8° 22'			
	TELE	17° 25' x 9° 48'		2° 52' x 1° 37'		4° 31' x 2° 34'			
Focus Range (From the Lens Front) (m)	∞ - 0.3		∞ - 1.5		∞ - 0.8		∞ - 0.3		
Mass (g)	80		160		50		85		

* 1: The iris automatically closes when the camera is turned off.
 ※ Each of the above products is also available in manual type.
 ※ Each of the above products is also available in long cable type (230 mm).

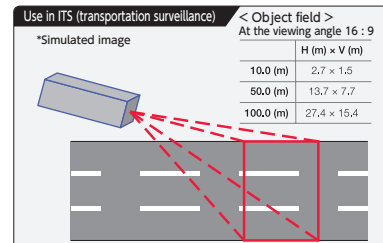
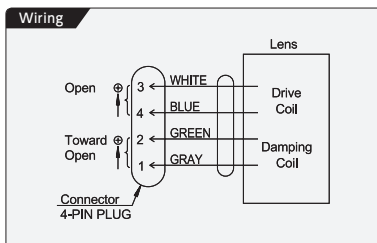
HF35SR4A-SA1L



Applicable camera (model) 1 2/3 1/2 1/3 1/4

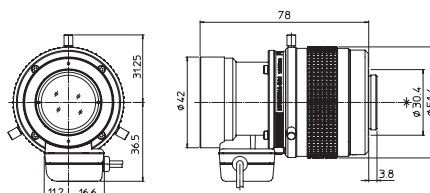


Unit : mm

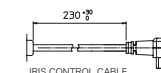


Fixed Focal TELE DC C-mt METAL ND Long Cable RoHS Compliant 5MP

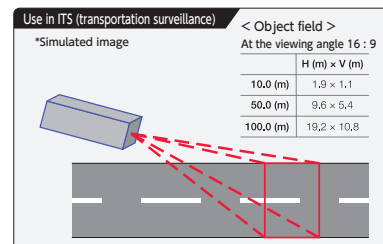
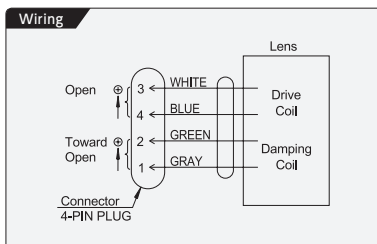
HF50SR4A-SA1L



Applicable camera (model) 1 2/3 1/2 1/3 1/4



Unit : mm

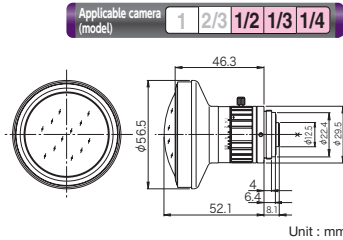


Fixed Focal TELE DC C-mt METAL ND Long Cable RoHS Compliant 5MP

	Applicable to 2/3	Applicable to 2/3
	HF35SR4A-SA1L	HF50SR4A-SA1L
Focal Length (mm)	35	50
Iris Range	F2.0 - T360	F2.8 - T360
Operation		Manual
		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)	2/3"	15° 36' × 8° 48'
	1/2"	11° 22' × 6° 25'
Aspect Ratio 16:9	1/1"	8° 33' × 4° 49'
Focus Range (From the Lens Front) (m)	∞ - 0.75	∞ - 1.0
Mass (g)	270	260

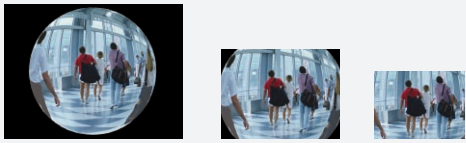
* 1 : The iris automatically closes when the camera is turned off.
 ※ Each of the above products is also available in manual type.

FE185C046HA-1



Unit : mm

Fish-Eye Lens View



1/2°

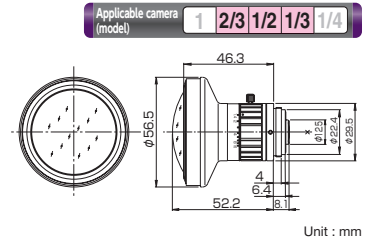
1/3°

1/4°

Fixed Focal **FIXED** Fish-Eye **Fish-Eye 185°** Manual Iris **MANUAL** C Mount **C-mt** Metal Mount **METAL** Large Aperture Ratio **F1.4** RoHS **RoHS**

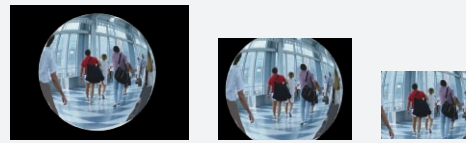
HD
5MP

FE185C057HA-1



Unit : mm

Fish-Eye Lens View



2/3°

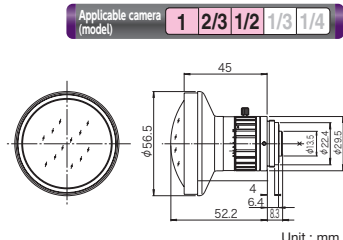
1/2°

1/3°

Fixed Focal **FIXED** Fish-Eye **Fish-Eye 185°** Manual Iris **MANUAL** C Mount **C-mt** Metal Mount **METAL** Large Aperture Ratio **F1.4** RoHS **RoHS**

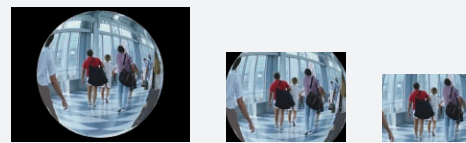
HD
5MP

FE185C086HA-1



Unit : mm

Fish-Eye Lens View



1°

2/3°

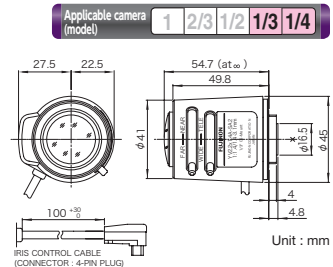
1/2°

Fixed Focal **FIXED** Fish-Eye **Fish-Eye 185°** Manual Iris **MANUAL** C Mount **C-mt** Metal Mount **METAL** RoHS **RoHS**

HD
5MP

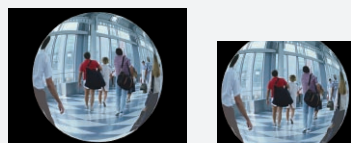
YV2.2x1.4A-SA2

2.2 x



Unit : mm

Fish-Eye Lens View



1/3°

1/4°

Vari-Focal **VARI** Fish-Eye **Fish-Eye 185°** DC Auto Iris **DC** CS Mount **CS-mt** ND Filter **ND** Long Cable **230** Large Aperture Ratio **F1.4** RoHS **RoHS**

	Applicable to 1/2	Applicable to 2/3	Applicable to 1	Applicable to 1/3
	FE185C046HA-1	FE185C057HA-1	FE185C086HA-1	YV2.2x1.4A-SA2
Focal Length	1.4	1.8	2.7	1.4 - 3.1 (2.2x)
Iris Range	F1.4 - F16	F1.4 - F16	F1.8 - F16	F1.4 - T360 (Equivalent to F360)
Operation	Zoom	-	-	Manual
	Focus	-	Fixed	Manual
Angle of View (H × V)	Iris	Manual	Manual	Auto (DC type)*1
	1°	-	-	-
	2/3°	-	185° × 185° (φ5.7mm)	185° × 185° (φ8.6mm)
	1/2°	185° × 185° (φ4.6mm)	185° × 140° 35'	185° × 140° 35'
	1/3°	185° × 144° 47'	185° × 154° 08'	136° 18' × 102° 19'
	1/4°	144° 47' × 108° 35'	154° 08' × 115° 27'	-
Focus Range (From the Lens Front) (m)	-	∞ - 0.1	-	∞ - 0.2
Mass (g)	140	135	160	80

*1: The iris automatically closes when the camera is turned off.

※ YV2.2 × 1.4A-SA2 is an SD lens and is also available in a long cable type (230 mm) or manual type.

For detailed specifications, see the following website: http://www.fujifilm.com/products/optical_devices/cctv/security/

HD Vari-Focal

HD Fixed Focal

HD Fish-Eye

Vari-Focal

Zoom

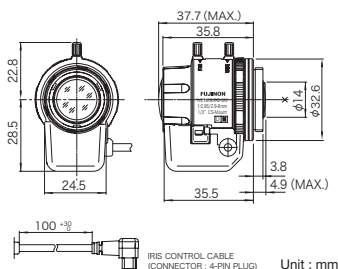
Zoom Lens Wiring

Technical Information

YV2.7x2.9LR4D-SA2

2.7 x

Applicable camera (model) 1 2/3 1/2 1/3 1/4



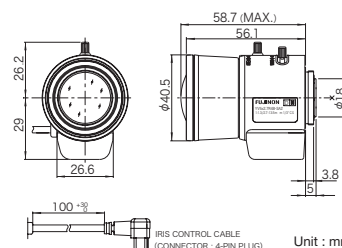
Unit : mm

Vari-Focal Wide Angle DC Auto Iris CS Mount Metal Mount ND Filter Long Cable Aspherical Lens Large Aperture Ratio RoHS Compliant
VARI WIDE DC CS-mt METAL ND 230 AT F0.95 RoHS

YV5x2.7R4B-SA2

5 x

Applicable camera (model) 1 2/3 1/2 1/3 1/4



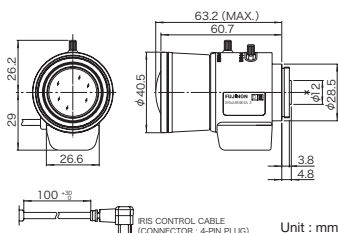
Unit : mm

Vari-Focal Wide Angle Telephoto Long Focal DC Auto Iris CS Mount Metal Mount ND Filter Long Cable Aspherical Lens Large Aperture Ratio RoHS Compliant
VARI WIDE TELE DC CS-mt METAL ND 230 AT F1.3 RoHS

DV5x3.6R4B-SA2

5 x

Applicable camera (model) 1 2/3 1/2 1/3 1/4



Unit : mm

Vari-Focal Wide Angle Telephoto Long Focal DC Auto Iris CS Mount Metal Mount ND Filter Long Cable Large Aperture Ratio RoHS Compliant
VARI WIDE TELE DC CS-mt METAL ND 230 AT RoHS

	Applicable to 1/3		Applicable to 1/3		Applicable to 1/2	
	YV2.7x2.9LR4D-SA2		YV5x2.7R4B-SA2		DV5x3.6R4B-SA2	
Focal Length (mm)	2.9 - 8(2.7x)		2.7 - 13.5(5x)		3.6 - 18(5x)	
Iris Range	F0.95 - T360(Equivalent to F360)		F1.3 - T360(Equivalent to F360)		F1.8 - T360(Equivalent to F360)	
Operation	Zoom		Manual			
	Focus		Manual			
			Auto (DC type)*1			
Angle of View (H × V)	1/2"	WIDE	-		95° 54' × 72° 24'	
		TELE	-		19° 57' × 15° 09'	
	1/3"	WIDE	94° 37' × 69° 30'		72° 24' × 54° 25'	
		TELE	35° 18' × 26° 26'		15° 09' × 11° 26'	
1/4"	WIDE	61° 30' × 51° 33'		54° 25' × 40° 50'		
	TELE	26° 26' × 19° 48'		15° 30' × 11° 38'		
Focus Range (From the Lens Front) (m)			∞ - 0.3			
Mass (g)	45		70		75	

* 1 : The iris automatically closes when the camera is turned off.
 ※ Each of the above products is also available in long cable type (230 mm).
 ※ Each of the above products is also available in manual type.

Vari-Focal

YV2.8x2.8LA-SA2

2.8 x

Applicable camera (model) 1 2/3 1/2 1/3 1/4



Vari-Focal Wide Angle DC Auto Iris CS Mount Metal Mount ND Filter Long Cable Aspherical Lens Large Aperture Ratio RoHS Compliant
VARI WIDE DC CS-mt METAL ND 230 AT F0.95 RoHS

YV10x5B-SA2

10 x

Applicable camera (model) 1 2/3 1/2 1/3 1/4

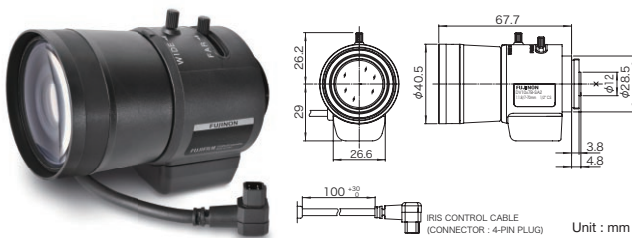


Vari-Focal Wide Angle Telephoto Long Focal DC Auto Iris CS Mount Metal Mount ND Filter Long Cable Aspherical Lens Large Aperture Ratio RoHS Compliant
VARI WIDE TELE DC CS-mt METAL ND 230 AT F1.3 RoHS

DV10x7B-SA2

10 x

Applicable camera (model) 1 2/3 1/2 1/3 1/4



※ To be discontinued when stock runs out.

Vari-Focal Wide Angle Telephoto Long Focal DC Auto Iris CS Mount Metal Mount ND Filter Long Cable Aspherical Lens RoHS Compliant
VARI WIDE TELE DC CS-mt METAL ND 230 AT RoHS

	Applicable to 1/3	Applicable to 1/3	Applicable to 1/2
	YV2.8x2.8LA-SA2	YV10x5B-SA2	DV10x7B-SA2
Focal Length (mm)	2.8 - 8(2.8x)	5 - 50(10x)	7 - 70(10x)
Iris Range	F0.95 - T360(Equivalent to F360)	F1.3 - T360(Equivalent to F360)	F1.8 - T360(Equivalent to F360)
Operation	Zoom	Manual	
	Focus	Manual	
		Auto (DC type)*1	
Angle of View (H x V)	1/2"	WIDE	50° 01' x 38° 12'
		TELE	5° 12' x 3° 59'
	1/3"	WIDE	99° 52' x 73° 17'
		TELE	35° 14' x 26° 24'
1/4"	WIDE	73° 17' x 54° 19'	
	TELE	26° 24' x 19° 47'	
Focus Range (From the Lens Front) (m)		∞ - 0.3	
Mass (g)	45		100

* 1: The iris automatically closes when the camera is turned off.

※ Each of the above products is also available in long cable type (230 mm).

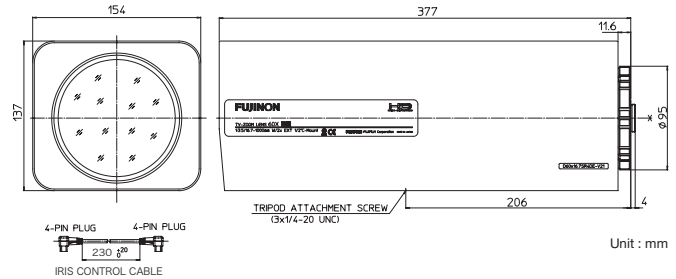
※ Each of the above products is also available in manual type.

D60x16.7SR4DE Series / D60x16.7SR4FE

60x

Applicable to 1/1.8

Applicable camera (model) 1 2/3 1/1.8 1/2 1/3 1/4



ZOOM **MOTOR DRIVE** **TELE** **AF** **OS-TECH** **DC** **IRIS-REMOTE** **C-mnt** **METAL** **PRESSET** **ND** **2x** **PC** **SERVO** **RoHS** **VISIBLE LIGHT CUT** **HD** **2MP**

Zoom Motor Drive Telephoto Long Focal Auto Focus Anti-Vibration DC Auto Iris Iris-Remote C Mount Metal Mount Potentiometer ND Filter Extender PC Control Full Servo RoHS Compliant

-ZP1A -ZPIC -V21 -ZP1A -ZP1A -ZP1C

		Applicable to 1/1.8		Applicable to 1/1.8		Applicable to 1/1.8	
		D60x16.7SR4DE-V21		D60x16.7SR4DE-ZP1A (AF)		D60x16.7SR4FE-ZP1C (AF and Anti-Vibration)	
Focal Length (mm)		1x		16.7 - 1000 (60x)			
		2x		33.4 - 2000			
Iris Range		1x		F3.5 - F16			
		2x		F7.0 - F32			
Filter				ND (1/8, 1/64), Visible Light Cut			
Operation	Zoom		Motor Drive			Servo Control	
	Focus		Motor Drive			Servo Control	
	Iris			Auto(DC type) or Remote*1			
AF			N/A			Available (with analog camera)	
Optical Anti-Vibration				N/A			Available
Angle of View (HxV)	1/1.8"	1x	WIDE	23° 5' × 17° 41'			
			TELE	0° 25' × 0° 19'			
	2x	WIDE	11° 46' × 8° 54'				
		TELE	0° 12' × 0° 9'				
1/2"	1x	WIDE	20° 53' × 15° 55'				
		TELE	0° 22' × 0° 17'				
	2x	WIDE	10° 35' × 7° 59'				
		TELE	0° 11' × 0° 8'				
Angle of View (HxV) (16:9)	1/1.8"	1x	WIDE	24° 56' × 14° 34'			
			TELE	0° 27' × 0° 15'			
	2x	WIDE	12° 47' × 7° 18'				
		TELE	0° 14' × 0° 8'				
1/2"	1x	WIDE	22° 35' × 13° 6'				
		TELE	0° 24' × 0° 14'				
2x	WIDE	11° 30' × 6° 32'					
	TELE	0° 12' × 0° 7'					
Focus Range (From the Lens Front) (m)				∞ - 5			
Object Dimensions at M.O.D. (H x V) (4:3) (mm)	1/1.8"	1x	WIDE	1975 × 1504			
			TELE	35 × 27			
	2x	WIDE	998 × 753				
		TELE	18 × 13				
1/2"	1x	WIDE	1782 × 1353				
		TELE	32 × 24				
	2x	WIDE	896 × 676				
		TELE	16 × 12				
Object Dimensions at M.O.D. (H x V) (16:9) (mm)	1/1.8"	1x	WIDE	2137 × 1237			
			TELE	38 × 22			
	2x	WIDE	1084 × 617				
		TELE	19 × 11				
1/2"	1x	WIDE	1931 × 1111				
		TELE	34 × 20				
2x	WIDE	974 × 553					
	TELE	17 × 10					
Back Focal Distance (in air) (mm)				24.85			
Exit Pupil Position (From Image Plane) (mm)				(1x) -448.80 (2x) -85.23			
Filter Thread (mm)				M112 × 0.75			
Mount				C			
Extender				2x			
Mass (kg)			6.5				7.1
Standard Accessories				IRIS CONTROL CABLE			
Wiring Diagram				P22			

* 1 : For details on the Iris-Remote connection, see the relevant Technical Reference (Page 28).

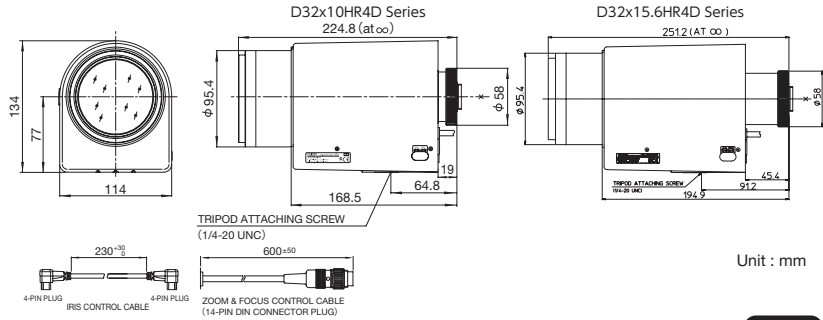
D32x10HR4D Series / D32x15.6HR4D Series

32 x



*Photograph of the D32x10HR4D series model

Applicable camera (model) 1 2/3 1/2 1/3 1/4



Zoom Motor Drive Wide Angle Telephoto Long Focal DC Auto Iris Video Auto Iris Iris-Remote C Mount Metal Mount Potentiometer ND Filter RoHS Compliant

ZOOM MOTOR DRIVE WIDE TELE DC VIDEO IRIS-REMOTE C-MT METAL PRESET ND RoHS 1.3MP

-YE1 -V41 -V41

			Applicable to 1/2	Applicable to 1/2	Applicable to 1/2	Applicable to 1/2
			D32x10HR4D-V41	D32x10HR4D-YE1	D32x15.6HR4D-V41	D32x15.6HR4D-YE1
焦点距離 (mm)			10 - 320(32x)		15.6 - 500(32x)	
Iris Range			F2.5 - T1500 (Equivalent to F1500)		F3.9 - T1500 (Equivalent to F1500)	
Operation	Zoom		Motor Drive			
	Focus		Motor Drive			
Iris			Auto (Video Type) or Remote*1*2		Auto (DC Type)*1	
Angle of View (H×V)	1/2°	WIDE	35° 29' × 26° 59'		23° 11' × 17° 30'	
		TELE	1° 09' × 0° 52'		0° 44' × 0° 33'	
	1/3°	WIDE	26° 59' × 20° 24'		17° 30' × 13° 10'	
		TELE	0° 52' × 0° 39'		0° 33' × 0° 25'	
Angle of View (H×V) (16:9)	1/2°	WIDE	36° 45' × 21° 29'		24° 41' × 14° 04'	
		TELE	1° 14' × 0° 42'		0° 49' × 0° 27'	
	1/3°	WIDE	28° 16' × 16° 13'		18° 41' × 10° 35'	
		TELE	0° 56' × 0° 32'		0° 37' × 0° 21'	
Focus Range (From the Lens Front) (m)			∞ - 3		∞ - 3	
Object Dimensions at M.O.D. (H × V) (4:3) (mm)	1/2°	WIDE	1746 × 1310		1179 × 884	
		TELE	57 × 43		37 × 28	
	1/3°	WIDE	1310 × 982		884 × 663	
		TELE	43 × 32		28 × 21	
Object Dimensions at M.O.D. (H × V) (16:9) (mm)	1/2°	WIDE	1891 × 1087		1253 × 709	
		TELE	62 × 35		41 × 23	
	1/3°	WIDE	1440 × 818		944 × 532	
		TELE	47 × 26		31 × 17	
Back Focal Distance (in air) (mm)			22.70		44.92	
Exit Pupil Position (From Image Plane) (mm)			-53		-75	
Filter Thread (mm)			M82 × 0.75		M82 × 0.75	
Mass (kg)			2.5		2.7	
Wiring Diagram			P23		P23	

* 1 : The Iris automatically closes when the camera is turned off.
 * 2 : For details on the Iris-Remote connection, see the relevant Technical Reference (Page 28).

Zoom position D60x16.7SR4DE Series

WIDE (16.7mm)

TELE (1,000mm)

*without Extender

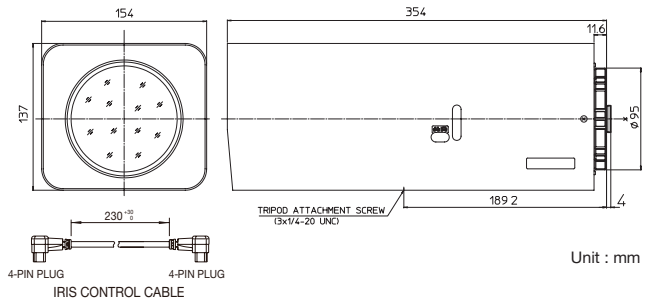


D60x12.5BE-V41 / D60x12.5R3DE Series

Day
Night

60x

D60x12.5R3DE-V41
D60x12.5R3DE-ZP1



D60x12.5BE-V41

Zoom Motor Drive Wide Angle Long Focal Telephoto Auto Iris Iris-Remote C Mount Metal Mount Potentiometer ND Filter Extender RoHS Compliant

ZOOM MOTOR DRIVE WIDE TELE VIDEO IRIS-REMOTE C-mt METAL PRESET ND 2x RoHS

D60x12.5R3DE Series

Zoom Motor Drive Wide Angle Long Focal Telephoto Auto Iris Iris-Remote C Mount Metal Mount Potentiometer ND Filter Extender PC Control Full Servo RoHS Compliant

ZOOM MOTOR DRIVE WIDE TELE VIDEO IRIS-REMOTE C-mt METAL PRESET ND 2x PC SERVO RoHS -V41 -ZP1 -ZP1

		Applicable to 1/2		Applicable to 1/2		Applicable to 1/2	
		D60x12.5BE-V41		D60x12.5R3DE-V41		D60x12.5R3DE-ZP1	
Focal Length (mm)	1x			12.5 - 750(60x)			
	2x			25 - 1500(60x)			
Iris Range	1x			F3.8 - T3000(Equivalent to F3000)			
	2x			F7.6 - T3000(Equivalent to F3000)			
Operation	Zoom			Motor Drive		Servo Control	
	Focus			Motor Drive		Servo Control	
	Iris			Auto (Video Type) or Remote*1*2		Auto (Video Type) or Remote or Servo Control*1*2	
Angle Of View (HxV)	1/2"	1x	WIDE	28° 43' x 21° 44'			
			TELE	0° 29' x 0° 22'			
		2x	WIDE	14° 35' x 10° 58'			
	1/3"	1x	WIDE	21° 44' x 16° 23'			
			TELE	0° 22' x 0° 17'			
		2x	WIDE	10° 58' x 8° 14'			
TELE	0° 11' x 0° 08'						
Focusing Range (From Front Of The Lens)(m)				∞ - 5			
Object Dimensions at M.O.D. (HxV) (mm)	1/2"	1x	WIDE	2465 x 1849			
			TELE	41 x 31			
		2x	WIDE	1233 x 924			
	1/3"	1x	WIDE	1849 x 1387			
			TELE	31 x 23			
		2x	WIDE	925 x 693			
TELE	16 x 12						
Back Focal Distance (in air) (mm)		1x		53.23			
		2x		31.10			
Exit Pupil Position (From Image Plane) (mm)		1x		-77			
		2x		-38			
Filter Thread (mm)				M107 x 1			
Extender				2x			
Mass (g)		5100				5200	
Wiring Diagram				P24			

* 1 : When power is turned off, iris will automatically close.

* 2 : For details on the Iris-Remote connection, see the relevant Technical Reference (Page 28).

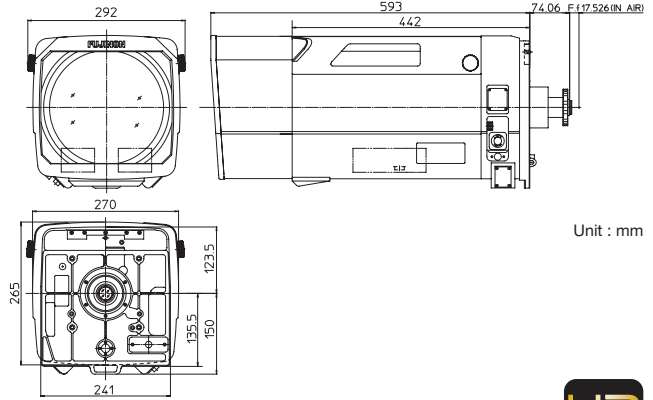
HC16x100R2CE-F11

Day Night 16x



*Manufacture on demand

Applicable camera (model) 1 2/3 1/2 1/3 1/4



Unit : mm

Zoom MOTOR DRIVE TELE VIDEO C-mt METAL AT PC SERVO 2x RoHS HD 3MP

C55x20P-EP1B / C55x20R2Q-EP1B

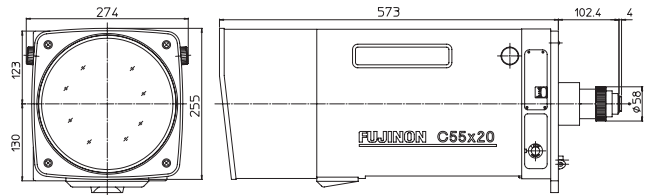
Day Night 55x

C55x20R2Q-EP1B



*Manufacture on demand

Applicable camera (model) 1 2/3 1/2 1/3 1/4



Unit : mm

Zoom MOTOR DRIVE TELE VIDEO C-mt METAL PC SERVO ND 2x RoHS

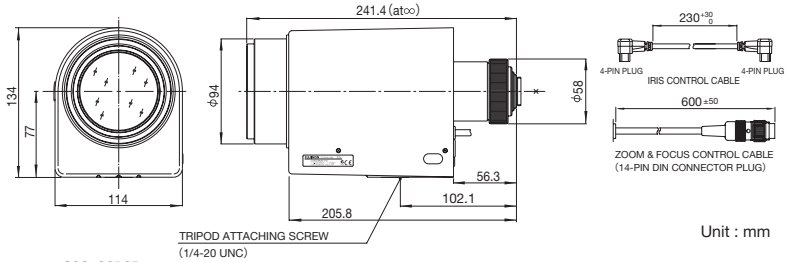
		Applicable to 1	Applicable to 1	Applicable to 1
		HC16x100R2CE-F11 * 1	C55x20P-EP1B	C55x20R2Q-EP1B
Focal Length (mm)	1x	100 - 1600 (16x)		20 - 1100(55x)
	2x	200 - 3200 (16x)		40 - 2200(55x)
Iris Range	1x	F3.4 - F16		F3.0 - T1500(Equivalent to F1500)
	2x	F6.8 - F32		F6.0 - T3000(Equivalent to F3000)
Operation	Zoom	Servo Control		Servo Control
	Focus	Servo Control		Servo Control
	Iris	Auto (Video Type) or Remote		Auto (Video Type) or Servo Control
Angle Of View (HxV)	1"	1x WIDE	7' 19" x 5' 30"	35' 29" x 26' 59"
		1x TELE	0' 28" x 0' 21"	0' 40" x 0' 30"
	2x	2x WIDE	3' 40" x 2' 45"	18' 10" x 13' 41"
		2x TELE	0' 14" x 0' 10"	0' 20" x 0' 15"
Focusing Range (From Front Of The Lens)(m)		∞ ~ 5		∞ - 2.4
Object Dimensions at M.O.D. (HxV) (mm)	1"	1x WIDE	603 x 452	1400 x 1051
		1x TELE	38 x 28	25 x 19
	2x	2x WIDE	302 x 226	700 x 525
		2x TELE	19 x 14	13 x 10
Back Focal Distance (in air) (mm)		29.38		28.04
Exit Pupil Position (From Image Plane) (mm)	1x	-125		-163
	2x	-111		-131
Extender		-		2x
Mass (kg)		24		21

* C55x13.5P-EP1B and C55x13.5R2Q-EP1B are also available.

* 1 : This model uses the CLH-12 lens support and two ESM-D51B servo modules (for Zoom and Focus)

C22x23 Series

Day Night 22x
C22x23R2D Series



Applicable camera (model) 1 2/3 1/2 1/3 1/4

C22x23B-V41

Zoom Motor Drive Long Focal Remote Iris Video Auto Iris Iris-Remote C-mount Metal Mount Potentiometer ND Filter RoHS Compliant
ZOOM MOTOR DRIVE TELE REMOTE VIDEO IRIS-REMOTE C-mt METAL PRESET ND RoHS

C22x23R2D Series

Zoom Motor Drive Long Focal Remote Iris Video Auto Iris Iris-Remote C-mount Metal Mount Potentiometer ND Filter PC Control Full Servo RoHS Compliant
ZOOM MOTOR DRIVE TELE VIDEO IRIS-REMOTE C-mt METAL PRESET ND PC SERVO RoHS
-V41 -ZP1 -ZP1

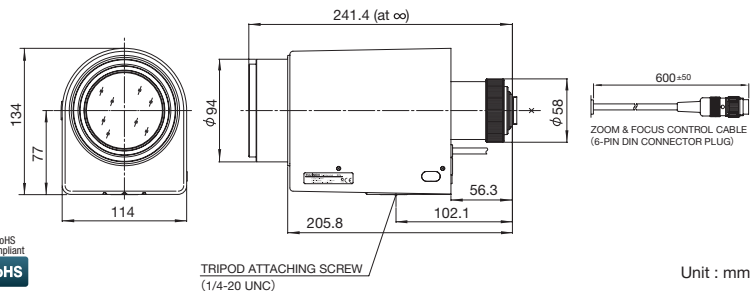
Unit : mm

	Applicable to 1	Applicable to 1	Applicable to 1
	C22x23B-V41	C22x23R2D-V41	C22x23R2D-ZP1
Focal Length (mm)	23 - 506(22x)		
Iris Range	F3.1 - T3000(Equivalent to F3000)		
Operation	Zoom	Motor Drive	Servo Control
	Focus	Motor Drive	Servo Control
	Iris	Auto(Video Type)or Remote*1	Auto(Video Type), Remote*1 or Servo Control
Angle Of View (H×V)	1° WIDE TELE	31° 06' × 23° 35'	
Focusing Range (From Front Of The Lens) (m)	∞ - 3		
Object Dimensions at M.O.D.(H×V) (mm)	1° WIDE TELE	1611 × 1208	
Back Focal Distance (in air) (mm)	73 × 55		
Exit Pupil Position (From Image Plane) (mm)	39.54		
Filter Thread (mm)	-64		
Mass (kg)	M82 × 0.75		
Wiring Diagram	2.4		
	P25		

* 1 : For details on the Iris-Remote connection, see the relevant Technical Reference (Page 28).

C22x17 Series

Day Night 22x
C22x17R2D Series



Applicable camera (model) 1 2/3 1/2 1/3 1/4

Zoom Motor Drive Wide Angle Long Focal Remote Iris Video Auto Iris Iris-Remote C-mount Metal Mount Potentiometer ND Filter RoHS Compliant
ZOOM MOTOR DRIVE WIDE TELE REMOTE VIDEO IRIS-REMOTE C-mt METAL PRESET ND RoHS
-M41 -V41 -S41 -Y41 -V41 -S41 -Y41

TRIPOD ATTACHING SCREW (1/4-20 UNC)

Unit : mm

	Applicable to 1	Applicable to 1	Applicable to 1	Applicable to 1	Applicable to 1
	C22x17A-M41	C22x17B-S41	C22x17B-Y41	C22x17R2D-V41	C22x17R2D-ZP1
Focal Length (mm)	17 - 374(22x)				
Iris Range	F2.3 - F22 • Close		F2.3 - T3000(Equivalent to F3000)		
Operation	Zoom		Motor Drive		Servo Control
	Focus		Motor Drive		Servo Control
	Iris	Motor Drive	Auto(Video Type)	Auto(Video Type)or Remote*1	Auto(Video Type) or Servo Control
Angle Of View (H×V)	1° WIDE TELE	41° 16' × 31° 32'			
Focusing Range (From Front Of The Lens) (m)	1° 58' × 1° 28'				
Object Dimensions at M.O.D.(H×V) (mm)	∞ - 3				
Back Focal Distance (in air) (mm)	66.93		67.38		
Exit Pupil Position (From Image Plane) (mm)	-127				
Filter Thread (mm)	M82 × 0.75				
Mass (kg)	2.3		2.5		2.3
Wiring Diagram	P25		P26		P25

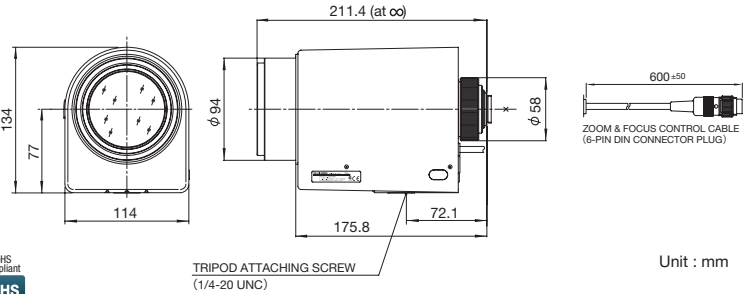
* 1 : For details on the Iris-Remote connection, see the relevant Technical Reference (Page 28).

H22x11.5 Series

22x



Applicable camera (model) 1 2/3 1/2 1/3 1/4



Unit : mm

Zoom MOTOR DRIVE WIDE TELE REMOTE VIDEO C-mt METAL PRESET ND F1.6 RoHS
-M41 -S41 -Y41

Applicable to 2/3

Applicable to 2/3

Applicable to 2/3

	H22x11.5A-M41	H22x11.5B-S41	H22x11.5B-Y41
Focal Length (mm)		11.5 - 253(22x)	
Iris Range	F1.6 - F22 · Close	F1.6 - T2000(Equivalent to F2000)	
Operation	Zoom	Motor Drive	
	Focus	Motor Drive	
			Auto(Video Type)
Angle Of View (H×V)	2/3° WIDE TELE	41° 52' × 32° 01'	
		2° 00' × 1° 30'	
Focusing Range (From Front Of The Lens) (m)		∞ - 3	
ObjectDimensions at M.O.D.(H×V) (mm)	2/3° WIDE TELE	2213 × 1660	
		101 × 75	
Back Focal Distance (in air) (mm)	35.95		36.16
Exit Pupil Position (From Image Plane) (mm)		-103	
Filter Thread (mm)		M82 × 0.75	
Mass (kg)		2.3	
Wiring Diagram	P25		P26

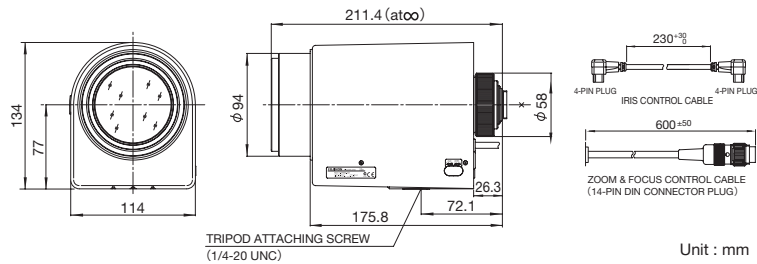
H22x11.5R2D Series

Day Night

22x



Applicable camera (model) 1 2/3 1/2 1/3 1/4



Unit : mm

Zoom MOTOR DRIVE WIDE TELE VIDEO IRIS-REMOTE C-mt METAL PRESET ND PC SERVO F1.6 RoHS
-V41 -ZP1

Applicable to 2/3

Applicable to 2/3

	H22x11.5R2D-V41	H22x11.5R2D-ZP1
Focal Length (mm)		11.5 - 253(22x)
Iris Range		F1.6 - T2000(Equivalent to F2000)
Operation	Zoom	Motor Drive
	Focus	Motor Drive
		Servo Control
		Servo Control
		Auto(Video Type), Remote*1 or Servo Control
Angle Of View (H×V)	2/3° WIDE TELE	41° 52' × 32° 01'
		2° 00' × 1° 30'
Focusing Range (From Front Of The Lens) (m)		∞ - 3
ObjectDimensions at M.O.D.(H×V) (mm)	2/3° WIDE TELE	2213 × 1660
		101 × 75
Back Focal Distance (in air) (mm)		36.16
Exit Pupil Position (From Image Plane) (mm)		-103
Filter Thread (mm)		M82 × 0.75
Mass (kg)		2.5
Wiring Diagram		P25

* 1 : For details on the Iris-Remote connection, see the relevant Technical Reference (Page 28).

For detailed specifications, see the following website: http://www.fujifilm.com/products/optical_devices/cctv/security/

HD Vari-Focal

HD Fixed Focal

HD Fish-Eye

Vari-Focal

Zoom

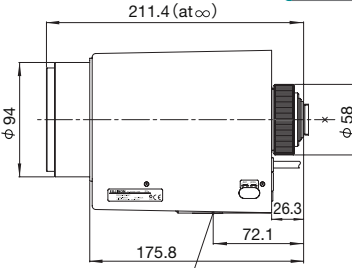
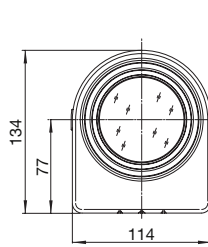
Zoom Lens Wiring

Technical Information

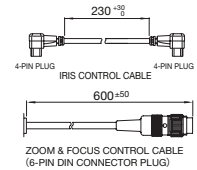
D22x9.1 Series

Day Night 22x

D22x9.1R2D-V41



Applicable camera (model) 1 2/3 1/2 1/3 1/4



Unit : mm

Zoom MOTOR DRIVE WIDE TELE VIDEO C-mt METAL PRESET ND F1.2 RoHS Compliant -Y41

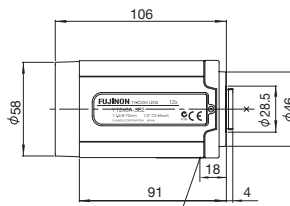
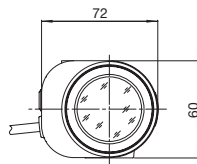
TRIPOD ATTACHING SCREW (1/4-20 UNC)

	Applicable to 1/2	Applicable to 1/2	Applicable to 1/2
	D22x9.1B-S41	D22x9.1B-Y41	D22x9.1R2D-V41
Focal Length (mm)		9.1 - 200(22x)	
Iris Range		F1.2 - T1500(Equivalent to F1500)	
Operation	Zoom	Motor Drive	
	Focus	Motor Drive	
Iris	Auto(Video Type)		Auto(Video Type) or Remote*1
Angle Of View (H×V)	1/2" WIDE TELE	38° 45' × 29° 33'	
Focusing Range (From Front Of The Lens) (m)		∞ - 3	
Object Dimensions at M.O.D.(H×V) (mm)	1/2" WIDE TELE	2034 × 1526	
Back Focal Distance (in air) (mm)		23.93	24.05
Exit Pupil Position (From Image Plane) (mm)		-676	-672
Filter Thread (mm)		M82 × 0.75	
Mass (kg)		2.3	2.5
Wiring Diagram		P26	P25

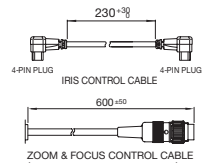
* 1 : For details on the Iris-Remote connection, see the relevant Technical Reference (Page 28).

Y12x6A Series

12x



Applicable camera (model) 1 2/3 1/2 1/3 1/4



Unit : mm

Zoom MOTOR DRIVE WIDE TELE DC CS-mt METAL PRESET ND F1.5 RoHS Compliant -YE2

TRIPOD ATTACHING SCREW (1/4-20 UNC)

	Applicable to 1/3	Applicable to 1/3
	Y12x6A-SE2	Y12x6A-YE2
Focal Length (mm)		6 - 72(12x)
Iris Range		F1.5 - T400(Equivalent to F400)
Operation	Zoom	Motor Drive
	Focus	Motor Drive
Iris		Auto(DC Type)*1
Angle Of View (H×V)	1/3" WIDE TELE	43° 36' × 33° 24'
Focusing Range (From Front Of The Lens) (m)		∞ - 1.3
Object Dimensions at M.O.D.(H×V) (mm)	1/3" WIDE TELE	1003 × 753
Back Focal Distance (in air) (mm)		84 × 63
Exit Pupil Position (From Image Plane) (mm)		11.69
Filter Thread (mm)		-6028
Mass (g)	330	M55 × 0.75
Coil Resistance		350
Current Consumption		Drive Coil 180 Ω Damping Coil 720 Ω
Wiring Diagram		22mA (Max.) at DC 4V P23

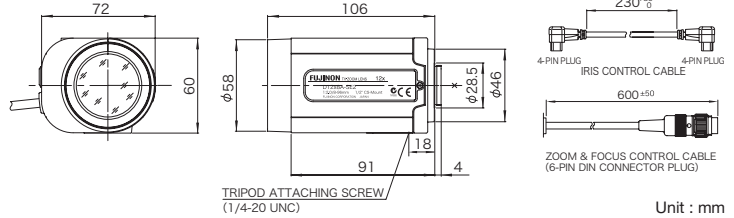
* 1 : When power is turned off, iris will automatically close.

D12x8A Series

12x



Applicable camera (model) 1 2/3 1/2 1/3 1/4



Zoom MOTOR DRIVE WIDE TELE DC CS-mt METAL PRESET ND Filter RoHS Compliant
 -YE2

	Applicable to 1/2	D12x8A-SE2	Applicable to 1/2	D12x8A-YE2
Focal Length (mm)				8 - 96(12x)
Iris Range				F2.0 - T400(Equivalent to F400)
Operation	Zoom			Motor Drive
	Focus			Motor Drive
Angle Of View (H×V)	1/2"	WIDE		43' 36" × 33' 24"
		TELE		3' 49" × 2' 52"
	1/3"	WIDE		33' 24" × 25' 22"
		TELE		2' 52" × 2' 09"
Focusing Range (From Front Of The Lens) (m)				∞ - 1.3
ObjectDimensions at M.O.D.(H×V) (mm)	1/2"	WIDE		1003 × 753
		TELE		84 × 63
	1/3"	WIDE		752 × 565
		TELE		63 × 47
Back Focal Distance (in air) (mm)				16.22
Exit Pupil Position (From Image Plane) (mm)				-51
Filter Thread (mm)				M55 × 0.75
Mass (g)		330		350
Wiring Diagram				P23

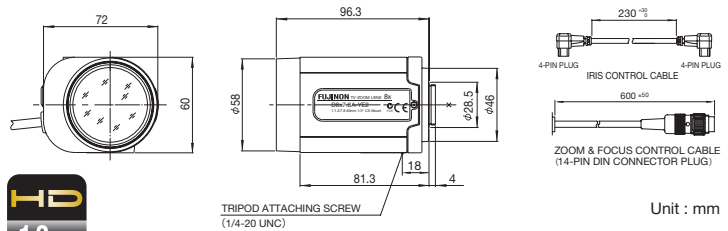
* 1 : When power is turned off, iris will automatically close.

D8x7.8HA Series

8x



Applicable camera (model) 1 2/3 1/2 1/3 1/4



Zoom MOTOR DRIVE WIDE DC VIDEO IRIS-REMOTE CS-mt METAL PRESET ND Filter Large Aperture Ratio RoHS Compliant
 -YE2 -SE2 -V42 -V42 -YE2 -V42



	Applicable to 1/2	D8x7.8HA-YE2	Applicable to 1/2	D8x7.8HA-SE2	Applicable to 1/2	D8x7.8HA-V42
Focal Length (mm)						7.8 - 63(8x)
Iris Range						F1.2 -T400(Equivalent to F400)
Operation	Zoom					Motor Drive
	Focus					Motor Drive
Angle Of View (H×V)	1/2"	WIDE				Auto(Video Type) or Remote*1
		TELE				
	1/3"	WIDE				
		TELE				
Focusing Range (From Front Of The Lens) (m)						∞ - 1.2
ObjectDimensions at M.O.D.(H×V) (mm)	1/2"	WIDE				944 × 708
		TELE				117 × 88
Back Focal Distance (in air) (mm)						14.00
Exit Pupil Position (From Image Plane) (mm)						-55
Filter Thread (mm)						M55 × 0.75
Extender						-
Mass (g)						400
Wiring Diagram						P24

* 1 : When power is turned off, iris will automatically close.

* 2 : For details on the Iris-Remote connection, see the relevant Technical Reference (Page 28).

For detailed specifications, see the following website: http://www.fujifilm.com/products/optical_devices/cctv/security/

HD Vari-Focal

HD Fixed Focal

HD Fish-Eye

Vari-Focal

Zoom

Zoom Lens Wiring

Technical Information

Zoom

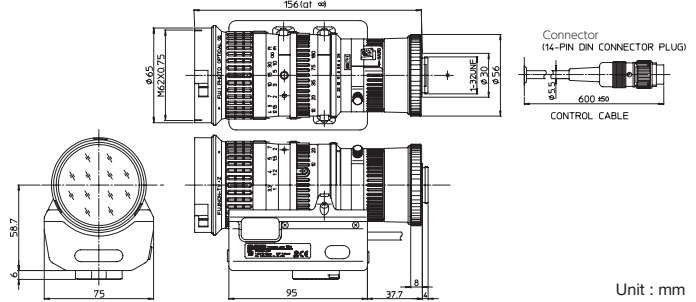
H16x10A-X41

16 x



*Manufacture on demand

Applicable camera (model) 1 2/3 1/2 1/3 1/4



Unit : mm

Zoom Motor Drive Wide Angle Telephoto Long Focal Remote Iris C-mount Metal Mount Potentiometer Meter RoHS Compliant
ZOOM MOTOR DRIVE WIDE TELE REMOTE C-mt METAL PRESET RoHS

Applicable to 2/3

H16x10A-X41

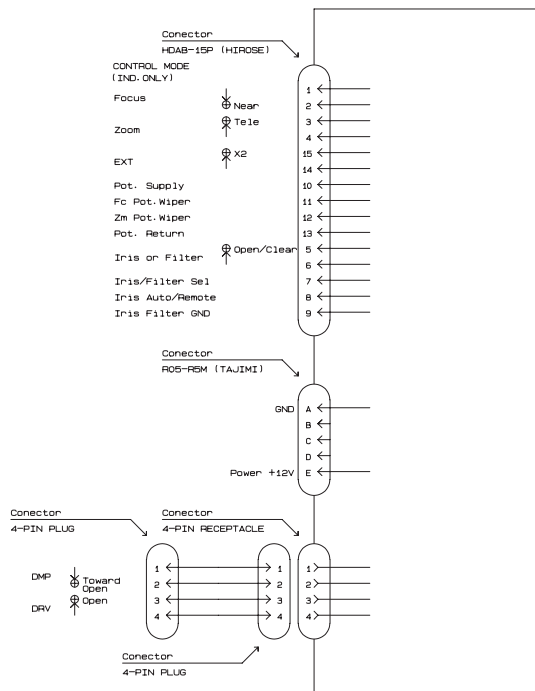
Focal Length (mm)	10 - 160(16x)	Focusing Range (From Front Of The Lens) (m)	$\infty - 1$
Iris Range	F2.5 - F22 (close)	ObjectDimensions at M.O.D.(H×V) (mm)	WIDE 862 × 620 TELE 54 × 40
Operation	Zoom	Motor Drive	Back Focal Distance (in air) (mm)
	Focus	Motor Drive	14.77
Angle Of View (H×V)	Iris	Motor Drive	Exit Pupil Position (From Image Plane) (mm)
	2/3" WIDE TELE	47° 30' × 36° 32' 3° 16' × 2° 27'	186.00
Wiring Diagram		Filter Thread (mm)	M62 × 0.75
		Mass (kg)	0.9

P26

Zoom Lens Wiring

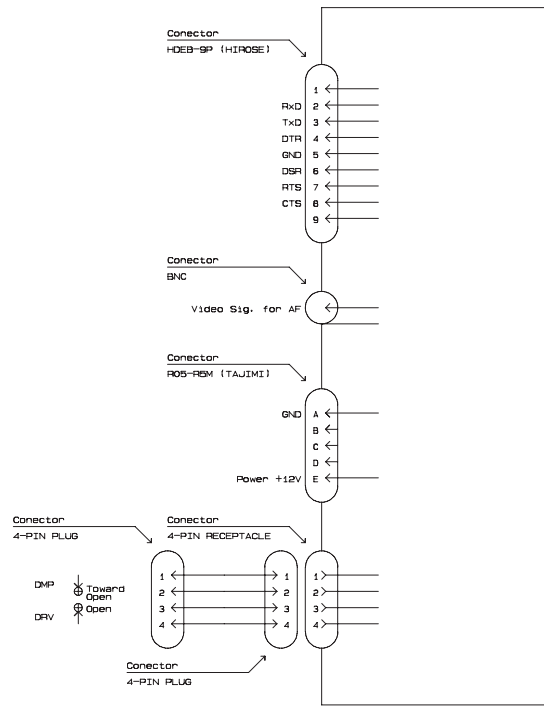
D60x16.7SR4DE-V21

P14



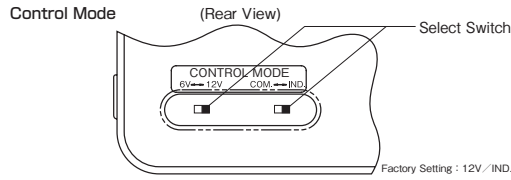
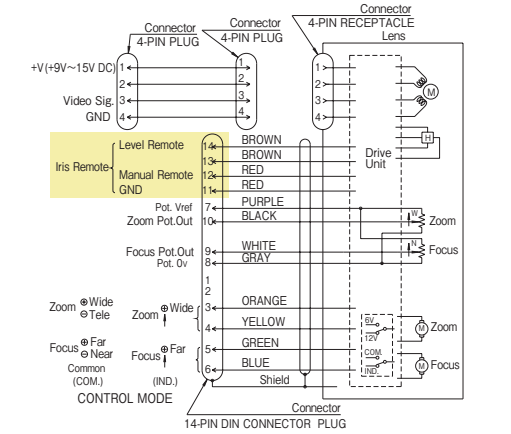
D60x16.7SR4DE-ZP1A
D60x16.7SR4FE-ZP1C

P14
P14



D32x10HR4D-V41
D32x15.6HR4D-V41

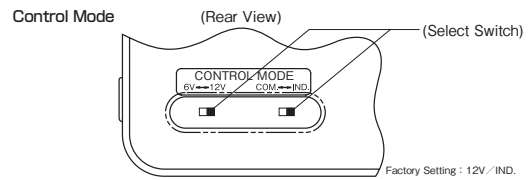
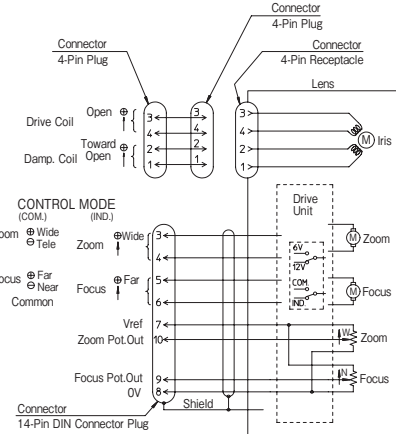
P15
P15



Controller Output	Select Switch Position
6V	6V / IND.
±6V	6V / COM.
12V	12V / IND.
±12V	12V / COM.

D32x10HR4D-YE1
D32x15.6HR4D-YE1

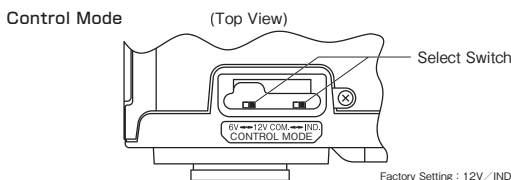
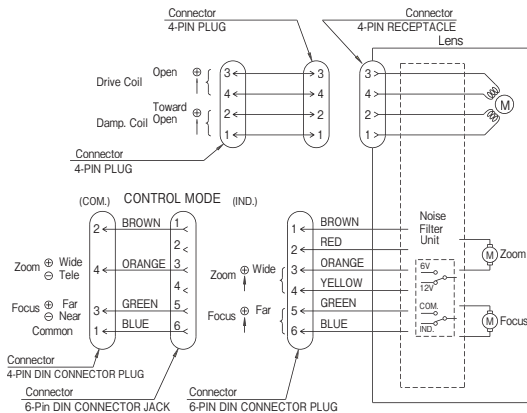
P15
P15



Controller Output	Select Switch Position
6V	6V / IND.
±6V	6V / COM.
12V	12V / IND.
±12V	12V / COM.

D8x7.8HA-SE2
Y12x6A-SE2
D12x8A-SE2

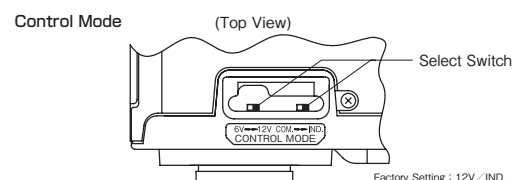
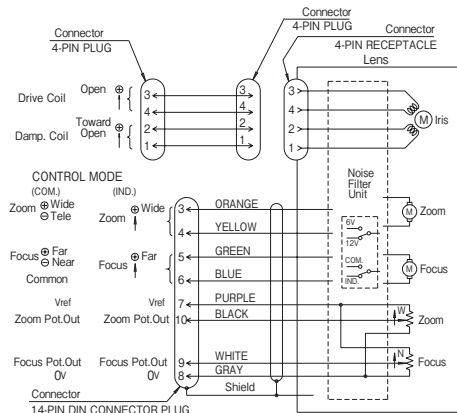
P21
P20
P21



Controller Output	Select Switch Position	Conversion Cable (Standard Accessory)
6V	6V / IND.	Not necessary
±6V	6V / COM.	Necessary
12V	12V / IND.	Not necessary
±12V	12V / COM.	Necessary

D8x7.8HA-YE2
Y12x6A-YE2
D12x8A-YE2

P21
P20
P21

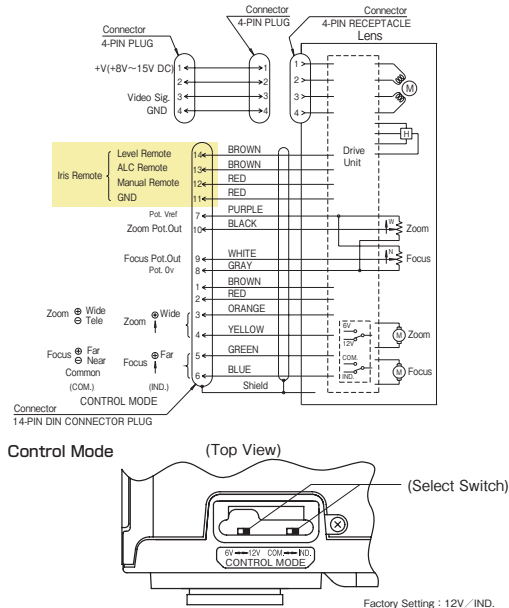


Controller Output	Select Switch Position
6V	6V / IND.
±6V	6V / COM.
12V	12V / IND.
±12V	12V / COM.

Zoom Lens Wiring

D8x7.8HA-V42

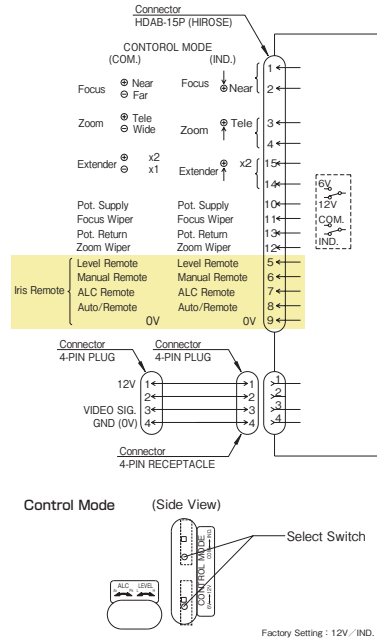
P21



Controller Output	Select Switch Position
6V	6V / IND.
±6V	6V / COM.
12V	12V / IND.
±12V	12V / COM.

D60x12.5BE-V41

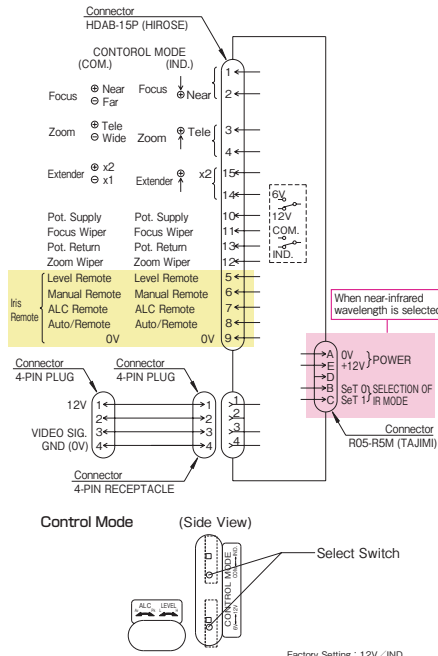
P16



Controller Output	Select Switch Position
6V	6V / IND.
±6V	6V / COM.
12V	12V / IND.
±12V	12V / COM.

D60x12.5R3DE-V41

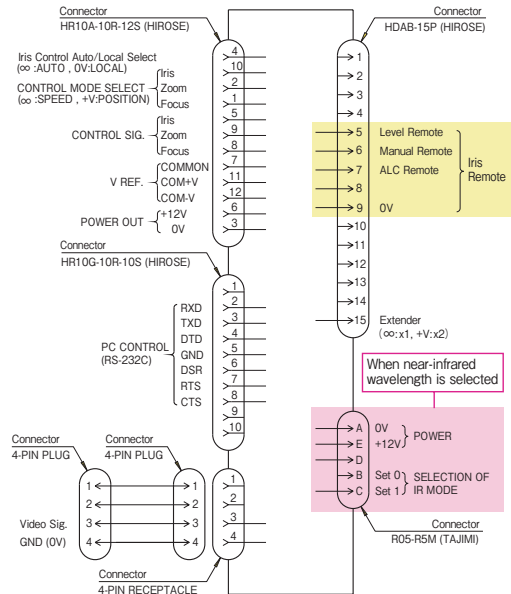
P16



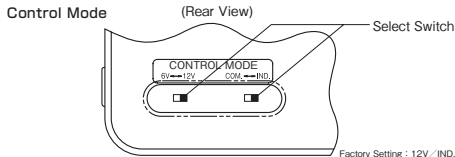
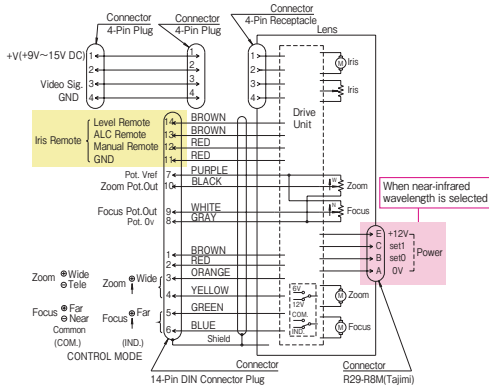
Controller Output	Select Switch Position
6V	6V / IND.
±6V	6V / COM.
12V	12V / IND.
±12V	12V / COM.

D60x12.5R3DE-ZP1

P16

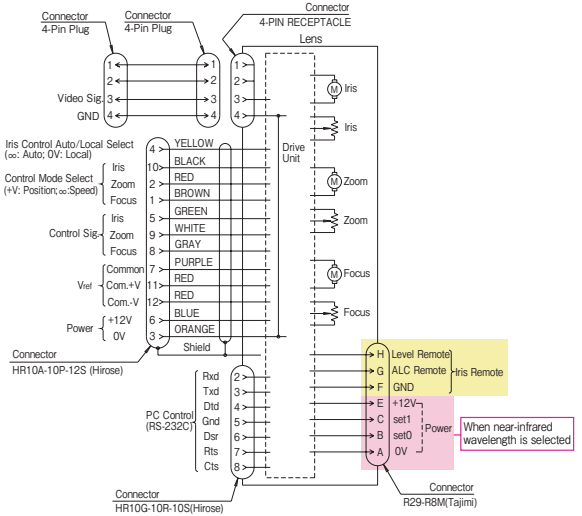


D22x9.1R2D-V41 _____ **P20**
H22x11.5R2D-V41 _____ **P19**
G22x17R2D-V41 _____ **P18**
G22x23R2D-V41 _____ **P18**

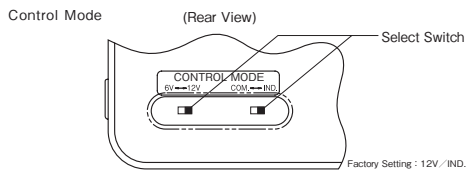
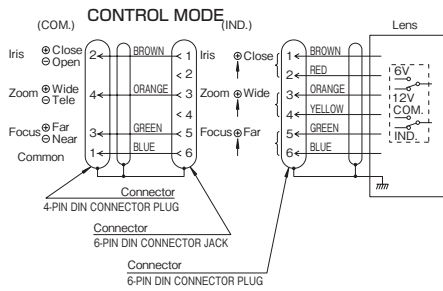


Controller Output	Select Switch Position
6V	6V / IND.
±6V	6V / COM.
12V	12V / IND.
±12V	12V / COM.

H22x11.5R2D-ZP1 _____ **P19**
G22x17R2D-ZP1 _____ **P18**
G22x23R2D-ZP1 _____ **P18**

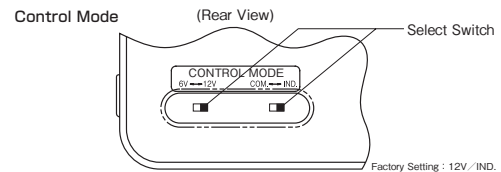
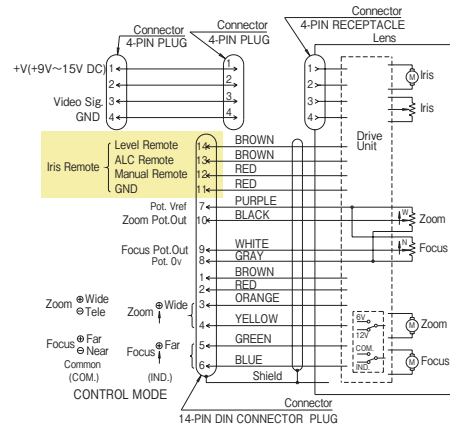


H22x11.5A-M41 _____ **P19**
G22x17A-M41 _____ **P18**



Controller Output	Select Switch Position	Conversion Cable (Standard Accessory)
6V	6V / IND.	Not necessary
±6V	6V / COM.	Necessary
12V	12V / IND.	Not necessary
±12V	12V / COM.	Necessary

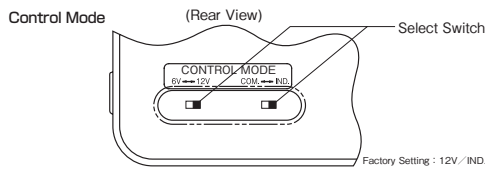
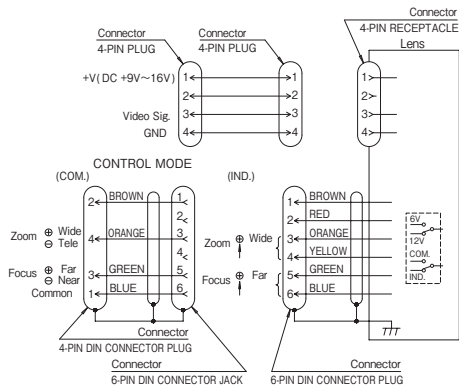
G22x23B-V41 _____ **P18**



Controller Output	Select Switch Position
6V	6V / IND.
±6V	6V / COM.
12V	12V / IND.
±12V	12V / COM.

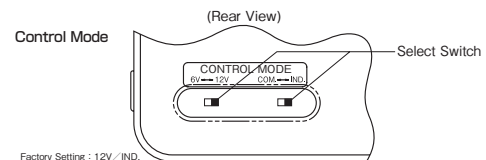
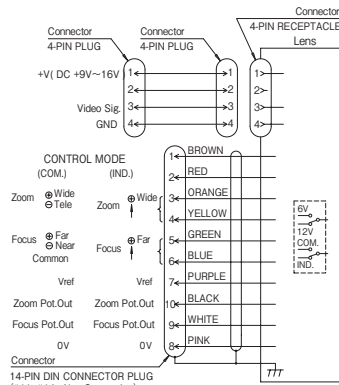
Zoom Lens Wiring

D22x9.1B-S41 _____ **P20**
H22x11.5B-S41 _____ **P19**
C22x17B-S41 _____ **P18**



Controller Output	Select Switch Position	Conversion Cable (Standard Accessory)
6V	6V / IND.	Not necessary
±6V	6V / COM.	Necessary
12V	12V / IND.	Not necessary
±12V	12V / COM.	Necessary

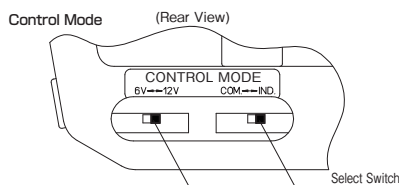
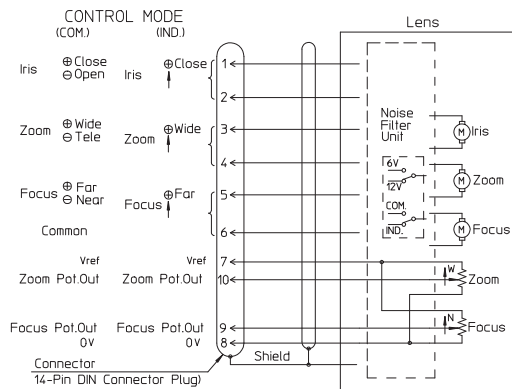
D22x9.1B-Y41 _____ **P20**
H22x11.5B-Y41 _____ **P19**
C22x17B-Y41 _____ **P18**



Controller Output	Select Switch Position
6V	6V / IND.
±6V	6V / COM.
12V	12V / IND.
±12V	12V / COM.

H16x10A-X41 _____ **P22**

WIRING DIAGRAM



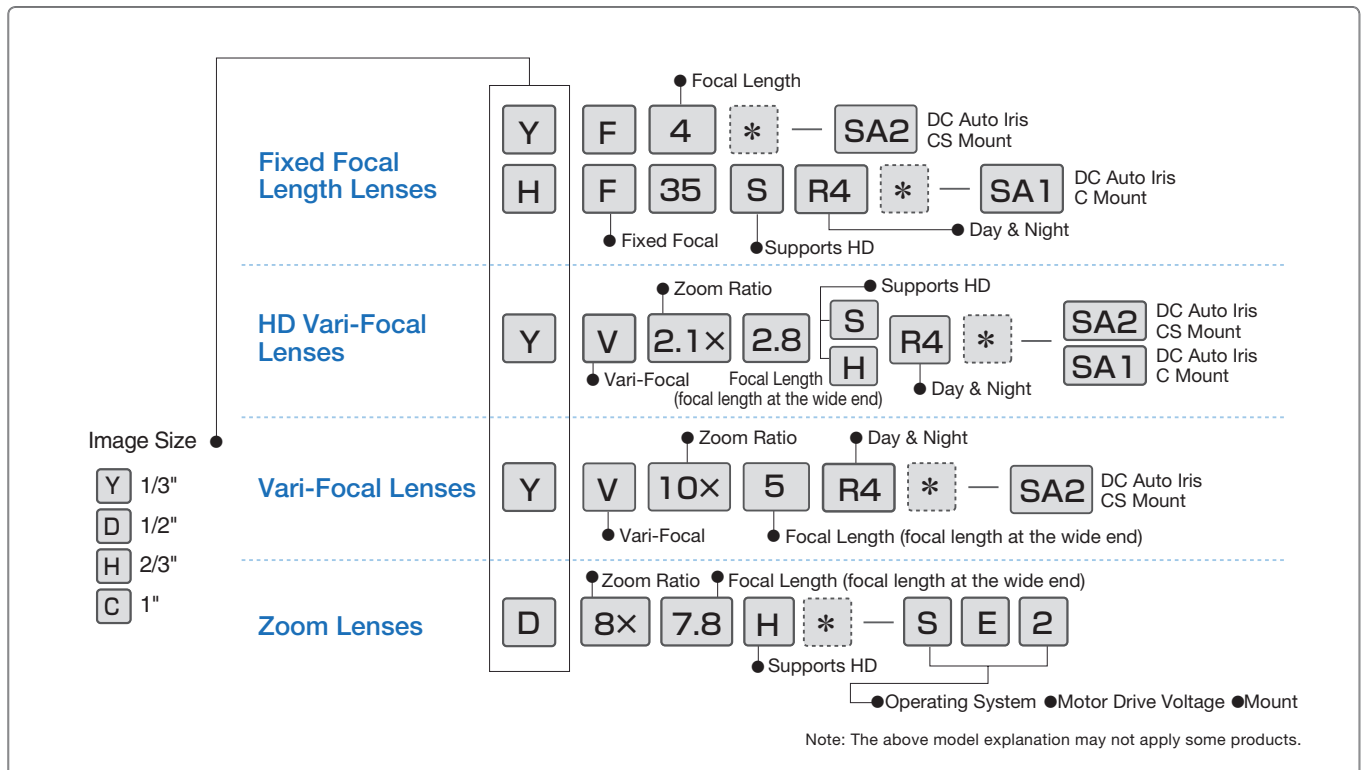
Controller Output	Select Switch Position
6V	6V / IND.
±6V	6V / COM.
12V	12V / IND.
±12V	12V / COM.

Technical Information

Feature Indications

Lens Type	Fixed Focal FIXED High performance single focal lens for the best image quality	Vari-Focal VARI Variable magnification lens with manually controllable angle. It functions as if you have multiple fixed focal lenses	Zoom ZOOM Zoom lens with the high performance cam adopted, which offers high quality smooth movements			
Feature/Function	5 Mpx HD HD 5MP High performance to fully exploit 5 megapixel HD cameras' high resolution	3 Mpx HD HD 3MP High performance to fully exploit 3 megapixel HD cameras' high resolution	2 Mpx HD HD 2MP High performance to fully exploit 2 megapixel HD cameras' high resolution	1.3 Mpx HD HD 1.3MP High performance to fully exploit 1.3 megapixel HD cameras' high resolution		
	Day & Night Day Night Specially-designed lens supporting both visible light and near-infrared light to prevent out-of-focus of day & night cameras	Visible Light Cut Filter VISIBLE LIGHT CUT Blocks visible light, allowing the capturing of image using only near-infrared light	Fish-Eye Fish-Eye 185° Super wide angle lens realizing angle of 185 degrees	Motor Drive MOTOR DRIVE Enables the lens control from remote locations	Telephoto Long Focal TELE Telephoto lens with the ability to zoom	Wide Angle WIDE Wide angle lens which ensures wide field of view
	Auto Focus AF Easy and sharp auto-focusing even in zooming	Optical Anti-Vibration OS-TECH High-intensity optical vibration isolation system, optimizing the image in any circumstances	For 3CCD Camera 3CCD Lens exclusively for 3CCD cameras for the optimum color reproduction and high resolution of 3CCD cameras	Built-in Built-in Cast-in lens resulted from abolition of the standard mounting method, enabling the downsizing of your system	Potential Meter PRESET Enables to preset the zoom, focus and iris positions of the zoom lens	ND Filter ND With the built-in ND filter, enables to optimize the brightness of the bright object in direct sunlight
	Extender 2x Function to double the focal length by one-touch control	PC Control PC Enables the advanced control of zoom lens using a PC	Long Cable 230 Cable length options provided to let you select the best-suited length for your camera	Full Servo SERVO DC servo circuit enabling the smooth movement and accurate positioning	Aspherical Lens AT Adopts the aspheric lens technologies developed in the most advanced lenses for broadcasting	RoHS Compliant RoHS
Iris Type	Manual Iris MANUAL Manually-operated iris	Remote Iris REMOTE Motor-driven iris	DC Auto Iris DC Auto iris supporting DC-controlled cameras	Video Auto Iris VIDEO Auto iris supporting video-controlled cameras	Iris-Remote IRIS-REMOTE Allows switching between auto iris and remote iris	
Mounting Type	C Mount C-mt Screw-in mounting commonly used in FA lenses	CS Mount CS-mt Screw-in mounting commonly used in security lenses	Metal Mount METAL Metal mounting with high accuracy and durability			
Large Aperture Ratio Bright lenses with large aperture ratio, fully exploiting camera sensitivity	F0.95	F1.2	F1.3	F1.4	F1.5	F1.6

Model Explanation



HD Vari-Focal

HD Fixed Focal

HD Fish-Eye

Vari-Focal

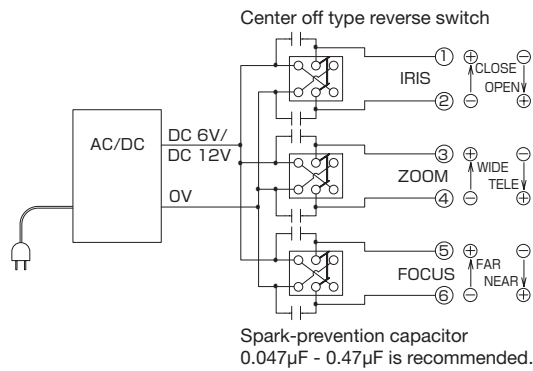
Zoom

Zoom Lens Wiring

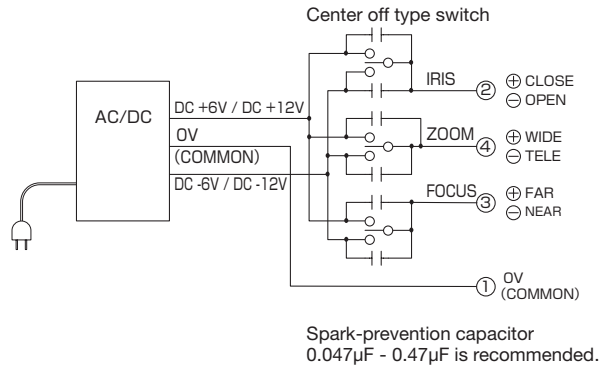
Technical Information

Recommended Lens Control Circuit

Operation System - M Type Zoom Lens [Independent Mode]

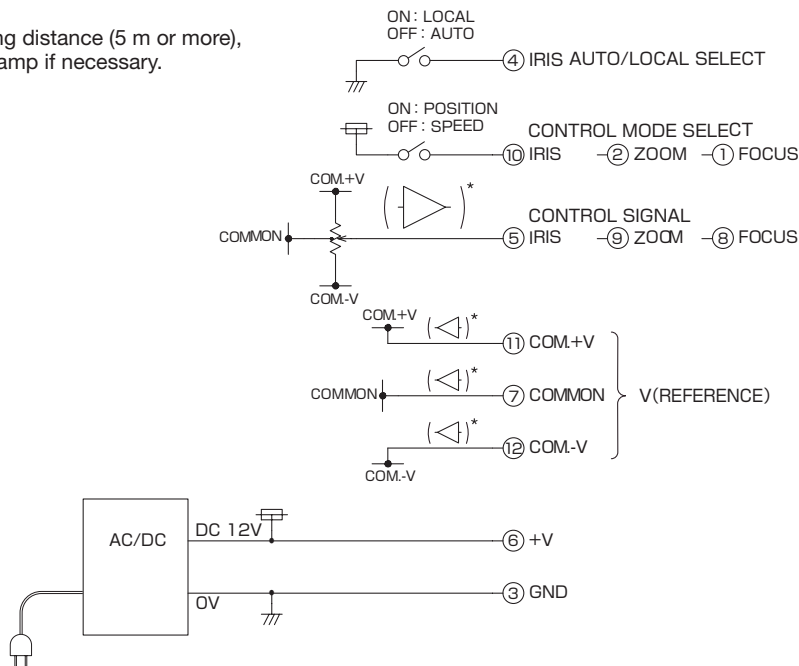


Operation System - M Type Zoom Lens [Common Mode]



Operation System - R Type Zoom Lens

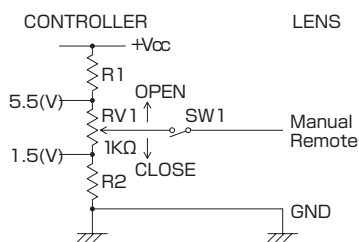
* In case of long distance (5 m or more), use a buffer amp if necessary.



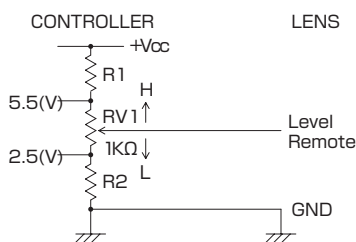
● "Independent mode" and "Common mode" can be selected with the control switch on the lenses.

Operation System - Iris Remote

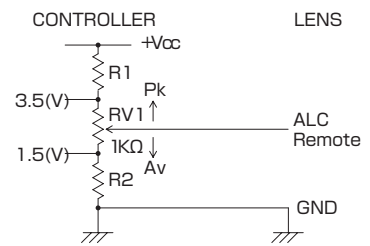
Manual Remote



Level Remote



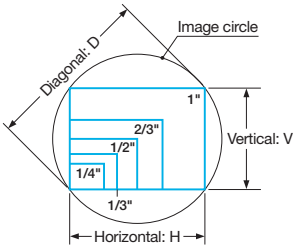
ALC Remote



Terminology

Image Sizes

- There are several types of imaging sensors for CCTV cameras, with different image sizes. The aspect ratio of a CCTV camera is normally 4:3 (H:V).



Product symbol	Image sensor	Image size (mm)		
		Horizontal: H	Vertical: V	Diagonal: D
C	1"	12.8	9.6	16.0
H	2/3"	8.8	6.6	11.0
D, S	1/2"	6.4	4.8	8.0
Y, T	1/3"	4.8	3.6	6.0
Q	1/4"	3.6	2.7	4.5
35 mm camera lens (Reference)	35 mm film	36.0	24.0	43.3

C/CS-Mount

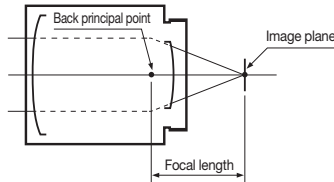
- CCTV cameras have either a C-mount or CS-mount.

	C-mount	CS-mount
Standard	Flange back focal length (mm)	17.526* ¹
	Diameter of screw thread (mm)	1-32UNF
Interchangeability	C-mount camera	CS-mount camera
	C-mount lens	CS-mount lens

*1 Length in air
*2 Will need a C-mount adapter ring (5 mm) when fitting a C-mount lens to a CS-mount camera.

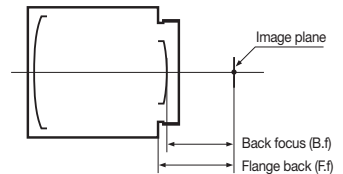
Focal Length

- The focal length will be the distance from the back principal point to the image plane. Lower the focal length wider the image.



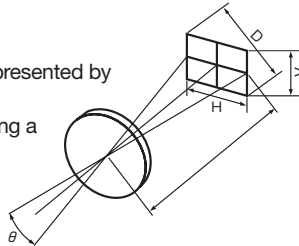
Flange Back and Back Focal Distance

- Flange back will be the distance between the mechanical mount surface and image plane. Back focal distance will be the distance between the rear end of the lens part and the image plane.



Angle of View

- The angle of view is the object size that can be captured at a specified image size, which is represented by angular measure. Normally the angle of view is measured assuming a lens is focused at infinity. When using a lens of the same focal length with a different image size, the angle of view will differ.



$$\theta = 2 \tan^{-1} \frac{Y'}{2f}$$

θ : Angle of view
 Y' : Image size
 f : Focal length

Example

The angle of view when the camera size is 1/2" and the focal length is 12.5 mm:

$$Y' : 6.4$$

$$f : 12.5$$

$$\theta = 2 \tan^{-1} \frac{6.4}{2 \times 12.5} = 28.72^\circ$$

Brightness of a Lens (F and T No.)

- The F No. is an indication of the brightness of lens. The smaller the value, the brighter the image produced by the lens. The F No. is inversely proportional to the effective diameter of the lens and directly proportional to the focal length. The scale on the iris ring of lens uses a ratio of 2, because the value of light incident on a lens is proportional to the cross section of luminous flux (square of diameter). In other words, the brightness decreases by half each time the F No. is increased by one F stop.

- The F No. is a value determined on the assumption that the transmittance of the lens is 100%. Virtually all lenses however, have different spectral transmittance, and thus, the same F No. can have different levels of brightness. To eliminate this inconvenience, a system has been developed to consider both F No. and spectral transmittance, the T No. The T No. and the F No. are related to each other as shown in right:

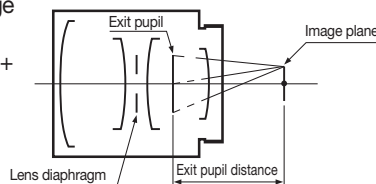
$$F \text{ No.} = \frac{f}{d}$$

f : Focal length of a lens
 d : Effective diameter of a lens

$$T \text{ No.} = \frac{F \text{ No.}}{\sqrt{\text{Transmittance (\%)}}} \times 10$$

Exit Pupil Position

- The exit pupil is the image (virtual image) reflected by the lens located at the back of the lens diaphragm. The exit pupil position is generally represented with the distance between the image plane and the exit pupil. "-" (minus) indicates closer to the object, and "+" (plus) toward the camera.

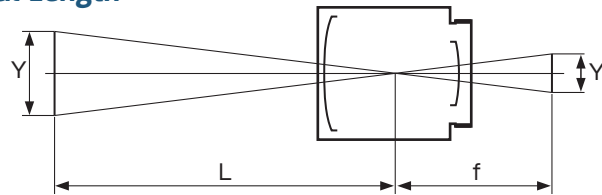


M.O.D.

- The M.O.D. (minimum object distance) is the closest distance to the object at which an image can be taken. This is the distance from the vertex of the front lens.

Technical Reference

Field of View and Focal Length



Y : Object size
 Y' : Image size
 L : Object distance
 f : Focal length

(1) How to calculate the field of view

If the distance to the object is finite, you can use the following formula to calculate the field of view.

$$Y = Y' \cdot \frac{L}{f}$$

Example

A 1/3" CCD camera with an 8 mm lens is used, and the distance to the object is 3 m. The maximum horizontal width as viewed on the monitor can be calculated as follows.

Y' : 4.8
 L : 3000
 f : 8

$$Y = 4.8 \times \frac{3000}{8} = 1800 \rightarrow \text{Horizontal width 1.8 m}$$

(2) How to calculate focal length

If the distance to the object is finite, you can use the following formula to calculate the focal length.

$$f = Y' \cdot \frac{L}{Y}$$

Example

A 1/3" CCD camera is used, and the distance to the object is 3 m and the horizontal width of the object is 2 m. The focal length to capture the complete object size can be calculated as follows.

Y' : 4.8
 L : 3000
 Y : 2000

$$f = 4.8 \times \frac{3000}{2000} = 7.2 \rightarrow \text{Focal length approx. 7 mm}$$

Depth of Field

- When focusing on a certain area in front of and behind the deep object appears in focus. This area is called the depth of field. This is because the focus appears sharp if the focus misalignment is under a certain volume. This certain volume is called the permissible circle of confusion.

The depth of field has following properties.

- The larger the F No. is, the wider the depth of field becomes.
- The shorter the focal length is, the wider the depth of field becomes.
- The longer the distance to the object is, the wider the depth of field becomes.
- The backward depth of field is wider than the forward depth of field.

Image sensor	Permissible circle of confusion
1"	0.03 mm
2/3"	0.021 mm
1/2"	0.015 mm
1/3"	0.011 mm
1/4"	0.008 mm

The depth of field can be calculated by the following formula.

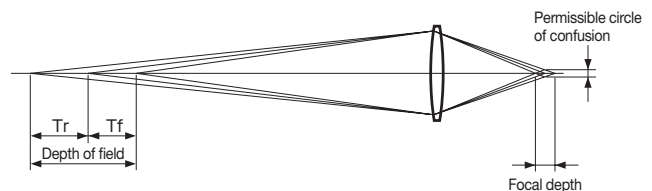
Backward depth of field $T_r = \frac{\delta \cdot F \cdot L^2}{f^2 - \delta \cdot F \cdot L}$

Forward depth of field $T_f = \frac{\delta \cdot F \cdot L^2}{f^2 + \delta \cdot F \cdot L}$

Depth of field = $T_r + T_f$

Focal depth = $2\delta \cdot F$

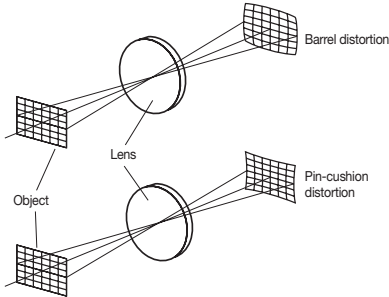
f: Focal distance
 F: F No.
 δ : Permissible circle diameter of confusion
 L: Object distance



Technical Reference

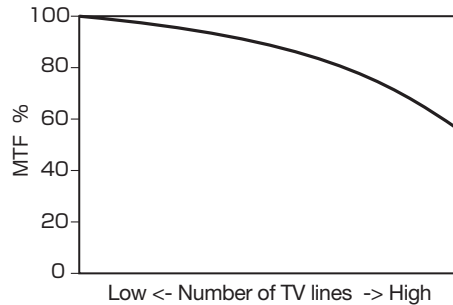
Distortion

- Distortion is an aberration where the geometric figure of the object is not reproduced faithfully at the image plane. It is normally represented by the level shift of an image point from its ideal position by a percentage of image height or width.



MTF (Modulation Transfer Function)

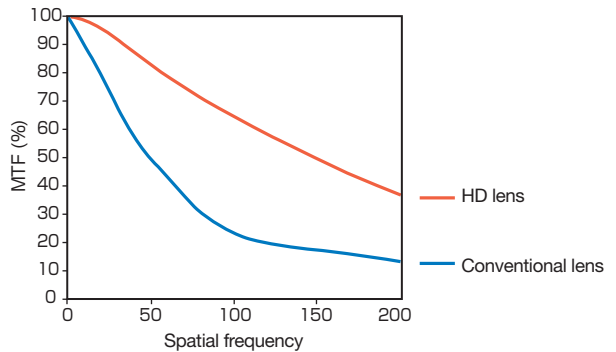
- MTF (Modulation Transfer Function) represents the declining contrast rate when shooting a chart consisted of black and white lines.



HD Lens

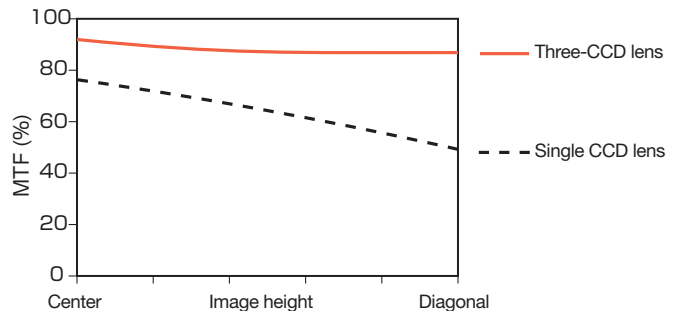
- Based on design techniques accumulated through our experience in production of broadcast lenses, high resolution, small and light-weight HD lenses with minimal aberrations have been realized.

The chart at the right shows the difference between an HD lens and a conventional CCTV lens. As the number of TV lines increases, the disparity in MTF becomes greater.



Three-CCD lenses

- Three-CCD cameras have thicker glass between the lens and the CCDs than that of single CCD cameras because they use three CCDs to correspond with the red, blue and green colors separated by a prism. Fujifilm's three-CCD lenses are designed to optimally match three-CCD cameras. The chart shown at the right explains the difference in MTF when a three-CCD lens or a single CCD lens is mounted on a three-CCD camera.

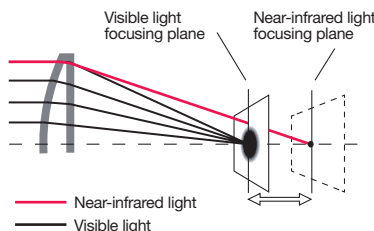


Day & Night Lens

- The day & night lens uses an advanced optical design, special optical glass, and other state-of-the-art technologies to focus light (visible to near-infrared 400- 1000 nm) on the same plane to prevent the focus to become blurry enabling sharp images.

A standard lens (for visible light)

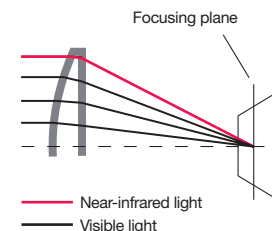
is mounted on a day & night camera, and used under near-infrared light.



Result: Blurry image

A day & night lens

is mounted on a day & night camera, and used under near-infrared light.



Result: Clear image without getting blurry

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For your safety

Be certain to read the instructions for use before using any equipment.

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