

Tokina

CCTV LENSES



MOTORIZED ZOOM LENS

VARIFOCAL LENS

VARIFOCAL INFRARED LENS FOR BOARD CAMERA—DAY AND NIGHT

MONOFOCAL LENS

MOTORIZED ZOOM LENS

Format 1/2" 1/3"	Zoom	Model No	Focal Length (mm)	Aperture (F)	M.O.D. (M)	Mount	Angle of View (Horizontal)(°)		Operation			Dimensions (mm)	Weight (g)
							1/2"	1/3"	Iris	Focus	Zoom		
-	7x	TM7Z0614GAI	6~42	1.4~360	1.5	CS	—	W43.6 T 6.5	Auto (Galvano)	Motorized	Motorized	65.0 x 75.3 x 102.5	500
-	7x	TM7Z0614GAIPN	6~42	1.4~360	1.5	CS	—	W43.6 T 6.5	Auto (Galvano)	Motorized With Preset	Motorized With Preset	65.0 x 75.3 x 102.5	500
-	7x	TM7Z0614GAIDC	6~42	1.4~360	1.5	CS	—	W43.6 T 6.5	D.D. (Galvano)	Motorized	Motorized	65.0 x 75.3 x 102.5	500
	7x	TM7Z0818GAI	8~56	1.8~360	1.5	C	W43.6 T 6.5	*W33.4 *T 4.9	Auto (Galvano)	Motorized	Motorized	65.0 x 75.3 x 102.5	500
	7x	TM7Z0818GAIPN	8~56	1.8~360	1.5	C	W43.6 T 6.5	*W33.4 *T 4.9	Auto (Galvano)	Motorized With Preset	Motorized With Preset	65.0 x 75.3 x 102.5	500
	7x	TM7Z0818GAIDC	8~56	1.8~360	1.5	C	W43.6 T 6.5	*W33.4 *T 4.9	D.D. (Galvano)	Motorized	Motorized	65.0 x 75.3 x 102.5	500
-	10x	TM10Z0614GAI	6~60	1.4~360	1.5	CS	—	W43.6 T 4.6	Auto (Galvano)	Motorized	Motorized	65.0 x 75.3 x 102.5	500
-	10x	TM10Z0614GAIPN	6~60	1.4~360	1.5	CS	—	W43.6 T 4.6	Auto (Galvano)	Motorized With Preset	Motorized With Preset	65.0 x 75.3 x 102.5	500
-	10x	TM10Z0614GAIDC	6~60	1.4~360	1.5	CS	—	W43.6 T 4.6	D.D. (Galvano)	Motorized	Motorized	65.0 x 75.3 x 102.5	500
	10x	TM10Z0818GAI	8~80	1.8~360	1.5	C	W43.6 T 4.6	*W33.4 *T 3.4	Auto (Galvano)	Motorized	Motorized	65.0 x 75.3 x 102.5	500
	10x	TM10Z0818GAIPN	8~80	1.8~360	1.5	C	W43.6 T 4.6	*W33.4 *T 3.4	Auto (Galvano)	Motorized With Preset	Motorized With Preset	65.0 x 75.3 x 102.5	500
	10x	TM10Z0818GAIDC	8~80	1.8~360	1.5	C	W43.6 T 4.6	*W33.4 *T 3.4	D.D. (Galvano)	Motorized	Motorized	65.0 x 75.3 x 102.5	500
	16x	TM16Z7518GAI	7.5-120	1.8~360	1.5	C	W46.2 T 3.1	W35.5 T 2.3	Motorized	Motorized	Motorized	65.0 x 75.3 x 104.0	550
	16x	TM16Z7518GAIPN	7.5-120	1.8~360	1.5	C	W46.2 T 3.1	W35.5 T 2.3	Auto (Galvano)	Motorized With Preset	Motorized With Preset	65.3 x 75.3 x 104.0	550
	16x	TM16Z7518GAIDC	7.5-120	1.8~360	1.5	C	W46.2 T 3.1	W35.5 T 2.3	D.D. (Galvano)	Motorized	Motorized	65.0 x 75.3 x 104.0	550
	20x	TM20Z1025N	10-200	2.5 C	2.5	C	W35.5 T 1.8	W27.0 T 1.4	Motorized	Motorized	Motorized	65.0 x 75.3 x 134.9	600
	20x	TM20Z1025NPN	10-200	2.5 C	2.5	C	W35.5 T 1.8	W27.0 T 1.4	Motorized	Motorized	Motorized	65.0 x 75.3 x 134.9	626
	20x	TM20Z1025GAI	10-200	2.5 360	2.5	C	W35.5 T 1.8	W27.0 T 1.4	Auto (Galvano)	Motorized	Motorized	65.0 x 75.3 x 134.9	600
	20x	TM20Z1025GAIPN	10-200	2.5 360	2.5	C	W35.5 T 1.8	W27.0 T 1.4	Auto (Galvano)	Motorized With Preset	Motorized With Preset	65.0 x 75.3 x 134.9	626
	20x	TM20Z1025GAIDC	10-200	2.5 360	2.5	C	W35.5 T 1.8	W27.0 T 1.4	D.D. (Galvano)	Motorized	Motorized With Preset	65.0 x 75.3 x 134.9	600
	22x	TM22Z1022N	10-220	2.2~C	1.8	C	W34.14 T 1.74	*W25.9 *T 1.31	Motorized	Motorized	Motorized	80.0 x 101.0 x 158.7	800
	22x	TM22Z1022AI	10-220	2.2~360	1.8	C	W34.14 T 1.74	*W25.9 *T 1.31	Auto	Motorized	Motorized	80.0 x 101.0 x 158.7	800
	22x	TM22Z1022AIPN	10-220	2.2~360	1.8	C	W34.14 T 1.74	*W25.9 *T 1.31	Auto	Motorized With Preset	Motorized With Preset	80.0 x 101.0 x 158.7	800
	22x	TM22Z1022GAIDC	10-220	2.2~360	1.8	C	W34.14 T 1.74	*W25.9 *T 1.31	D.D. (Galvano)	Motorized	Motorized	80.0 x 101.0 x 158.7	800
	22x	TM22Z1328N	13~220	2.8~C	1.8	C	W26.76 T 1.37	*W20.23 *T 1.02	Motorized	Motorized	Motorized	80.0 x 101.0 x 158.7	800
	22x	TM22Z1328AI	13~280	2.8~360	1.8	C	W26.76 T 1.37	*W20.23 *T 1.02	Auto	Motorized	Motorized	80.0 x 101.0 x 168.7	800
	22x	TM22Z1328AIPN	13~280	2.8~360	1.8	C	W26.76 T 1.37	*W20.23 *T 1.02	Auto	Motorized With Preset	Motorized With Preset	80.0 x 101.0 x 168.7	800
	22x	TM22Z1328GAIDC	13~280	2.8~360	1.8	C	W26.76 T 1.37	*W20.23 *T 1.02	D.D. (Galvano)	Motorized	Motorized	80.0 x 101.0 x 168.7	800

*It is possible to use a lens of format 1/2" on a camera of format 1/3" with a CS-adaptor ring.



TM7Z0614GAI



TM10Z0614GAI



TM16Z7518GAIDC



TM20Z1025GAIDC



TM22Z1022AI



TM50Z1040AIPNX

Format		Zoom	Model No	Focal Length (mm)	Aperture (F)	M.O.D. (M)	Mount	Angle of View (Horizontal) (°)		Operation			Dimensions (mm)	Weight (g)
1/2"	1/3"							1/2"	1/3"	Iris	Focus	Zoom		
		30x	TM30Z1028GAIR	10~300	2.8~C	4.0	C	W35.5 T 1.2	*W27.0 *T 0.9	Auto (Galvano)	Motorized	Motorized	105.0×92.0×218.5	1600
		30x	TM30Z1028GAIPNIR	10~300	2.8~360	4.0	C	W35.5 T 1.2	*W27.0 *T 0.9	Auto (Galvano)	Motorized With Preset	Motorized With Preset	105.0×92.0×218.5	1600

		33x	TM33Z1015N	10~330	1.5~C	2.9	C	W35.0 T 1.1	*W26.4 *T 0.9	Motorized	Motorized	Motorized	122×125×260.5	3000
		33x	TM33Z1015AI	10~330	1.5~560	2.9	C	W35.0 T 1.1	*W26.4 *T 0.9	Auto	Motorized	Motorized	122×125×260.5	3000
		33x	TM33Z1015AIPN	10~330	1.5~560	2.9	C	W35.0 T 1.1	*W26.4 *T 0.9	Auto	Motorized With Preset	Motorized With Preset	122×125×260.5	3000

		50x	TM50Z1040N	10~500	4.0~C	4.0	C	W35.5 T 0.7	*W27.0 *T 0.4	Motorized	Motorized	Motorized	104.0×124.0×314.0	3000
		50x	TM50Z1040NPN	10~500	4.0~C	4.0	C	W35.5 T 0.7	*W27.0 *T 0.4	Motorized With Preset	Motorized With Preset	Motorized With Preset	104.0×124.0×314.0	3000
		50x	TM50Z1040AI	10~500	4.0~360	4.0	C	W35.5 T 0.7	*W27.0 *T 0.4	Auto	Motorized	Motorized	104.0×124.0×314.0	3000
		50x	TM50Z1040AIPN	10~500	4.0~360	4.0	C	W35.5 T 0.7	*W27.0 *T 0.4	Auto	Motorized With Preset	Motorized With Preset	104.0×124.0×314.0	3000

		50x	TM50Z1040NX2	10~1000	4.0~C	4.0	C	W35.5 T 0.4	*W27.0 *T 0.3	Motorized	Motorized	Motorized	104.0×124.0×314.0	3200
		50x	TM50Z1040NPNX2	10~1000	4.0~C	4.0	C	W35.5 T 0.4	*W27.0 *T 0.3	Motorized With Preset	Motorized With Preset	Motorized With Preset	104.0×124.0×314.0	3200
		50x	TM50Z1040AIX2	10~1000	4.0~360	4.0	C	W35.5 T 0.4	*W27.0 *T 0.3	Auto	Motorized	Motorized	104.0×124.0×314.0	3200
		50x	TM50Z1040AIPNX2	10~1000	4.0~360	4.0	C	W35.5 T 0.4	*W27.0 *T 0.3	Auto	Motorized With Preset	Motorized With Preset	104.0×124.0×314.0	3200

*It is possible to use a lens of format 1/2" on a camera of format 1/3" with a CS-adapter ring.

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Format	Zoom	Model No	Focal Length (mm)	Aperture (F)	M.O.D. (M)	Mount	Angle of View (Horizontal) (°)		Operation			Dimensions (mm)	Weight (g)
							1/2"	1/3"	Iris	Focus	Zoom		
-	3.2x	TVR2514IR	2.5~8	1.4~C	0.2	CS	—	W105.0 T 35.3	Manual	Manual	Manual	33.0×53.0	95
-	3.2x	TVR2514DCIR	2.5~8	1.4~360	0.2	CS	—	W105.0 T 35.3	Direct Drive	Manual	Manual	33.0×39.5×53.0	100

-	4.6x	TVR2714	2.7~12.5	1.4~C	0.3	CS	—	W97.14 T 23.17	Manual	Manual	Manual	43.0×68.9	85
-	4.6x	TVR2714DC	2.7~12.5	1.4~360	0.3	CS	—	W97.14 T 23.17	Direct Drive	Manual	Manual	39.5×44.5×68.9	95

-	2.7x	TVR0310IR	3~8	1.0~C	0.2	CS	—	W90.5 T 33.6	Manual	Manual	Manual	35×46	50
-	2.7x	TVR0310DCIR	3~8	1.0~360	0.2	CS	—	W90.5 T 33.6	Direct Drive	Manual	Manual	35×47.4×46	60

-	2.4x	TVR3314	3.3~8	1.4~C	0.3	CS	—	W81.95 T 36.24	Manual	Manual	Manual	33.5×39.7	40
-	2.4x	TVR3314DC	3.3~8	1.4~360	0.3	CS	—	W81.95 T 36.24	Direct Drive	Manual	Manual	38.7×40.5	60

	2.5x	TVR0614	6~15	1.4~C	0.3	C	W59.13 T 25.65	*W44.06 *T 19.23	Manual	Manual	Manual	39.5×58.5	105
	2.5x	TVR0614DC	6~15	1.4~360	0.3	C	W59.13 T 25.65	*W44.06 *T 19.23	Direct Drive	Manual	Manual	39.5×63.3×58.5	125

-	10x	TVR0616	6~60	1.6~C	0.1	CS	—	W43.62 T 4.73	Manual	Manual	Manual	35×74	95
-	10x	TVR0616DC	6~60	1.6~360	0.1	CS	—	W43.62 T 4.73	Direct Drive	Manual	Manual	35×52×74	110

	12x	TVR1016	10~120	1.6~C	0.3	C	W34.95 T 3.20	W26.20 T 2.40	Manual	Manual	Manual	55×122.5	270
	12x	TVR1016DC	10~120	1.6~360	0.3	C	W34.95 T 3.20	W26.20 T 2.40	Direct Drive	Manual	Manual	55×64×122.5	300

*It is possible to use a lens of format 1/2" on a camera of format 1/3" with a CS-adaptor ring.



TVR2514DCIR



TVR3314DC



TVR2714DC



TVR0614DC



TVR0616DC

VARIFOCAL INFRARED LENS FOR BOARD CAMERA - DAY AND NIGHT

Format		Zoom	Model No	Focal Length (mm)	Aperture (F)	M.O.D. (M)	Mount	Angle of View (Horizontal) (°)		Operation			Dimensions (mm)	Weight (g)
1/3"	1/4"							1/3"	1/4"	Iris	Focus	Zoom		
-		2.5x	TVB2414DC	2.4~6.0	1.4~360	0.3	M12 P=0.5	—	W 84.9 T 36.8	Direct Drive	Manual	Manual	34.9×38.0	30
		2.3x	TVB3516DCIR	3.5~8	1.6~360	0.2	M13 P=1.0	W 78.9 T 35.4	W 67.1 T 26.3	Direct Drive	Manual	Manual	34.1×37.8	39
		3.6x	TVB3315DCIR	3.3~12.0	1.5~360	0.3	M14 P=1.0	W 83.9 T 23.0		Direct Drive	Manual	Manual	28.5(34.1)×39.2	40
		2.7x	TVB0615DCIR	6.0~16.0	1.5~360	0.2	M14 P=1.0	W 47.0 T 18.9		Direct Drive	Manual	Manual	28.5(34.1)×39.2	40
		2.4x	TVB0920DCIR	9.0~22.0	2.0~360	0.3	M14 P=1.0	W 29.2 T 13.0	W 22.1 T 9.7	Direct Drive	Manual	Manual	28.5(34.1)×39.2	40



TVB3516DCIR



TVB3315DCIR



TVB0615DCIR



TVB0920DCIR

MONOFOCAL LENS

Format		Model No	Focal Length (mm)	Aperture (F)	M.O.D. (M)	Mount	Angle of View (Horizontal) (°)		Operation		Dimensions (mm)	Weight (g)
1/2"	1/3"						1/2"	1/3"	Iris	Focus		
-		TC2814NI	2.8	1.4	0.1	CS	—	93.6	Fixed	Manual	33.0 × 33.5	50
-		TC2814	2.8	1.4 ~ C	0.1	CS	—	93.6	Manual	Manual	30.0 × 32.0	50
-		TC2814DC	2.8	1.4 ~ 360	0.1	CS	—	93.6	Direct Drive	Manual	34.4 × 46.5 × 32.5	75
-		TC2814AI	2.8	1.4 ~ 360	0.1	CS	—	93.6	Auto	Manual	34.4 × 46.5 × 32.5	75

-		TC0412NI	4.0	1.2	0.3	CS	—	63.8	Fixed	Manual	31.0 × 31.5	50
-		TC0412	4.0	1.2 ~ C	0.3	CS	—	63.8	Manual	Manual	31.0 × 31.5	50
-		TC0412DC	4.0	1.2 ~ 360	0.3	CS	—	63.8	Direct Drive	Manual	34.4 × 46.5 × 32.5	50
-		TC0412AI	4.0	1.2 ~ 360	0.3	CS	—	63.8	Auto	Manual	34.4 × 46.5 × 32.5	50

		TC0614	6.0	1.4 ~ C	0.3	C	61.61	*46.02	Manual	Manual	38.0 × 36.3	65
		TC0614DC	6.0	1.4 ~ 360	0.3	C	61.61	*46.02	Direct Drive	Manual	37.0 × 48.7 × 36.5	80
		TC0614AI	6.0	1.4 ~ 360	0.3	C	61.61	*46.02	Auto	Manual	37.0 × 48.7 × 36.5	80

-		TC0812NI	8.0	1.2	0.3	CS	—	33.5	Fixed	Manual	31.0 × 20.0	40
-		TC0812	8.0	1.2 ~ C	0.3	CS	—	33.5	Manual	Manual	31.0 × 30.9	40
-		TC0812DC	8.0	1.2 ~ 360	0.3	CS	—	33.5	Direct Drive	Manual	34.4 × 46.5 × 32.5	75
-		TC0812AI	8.0	1.2 ~ 360	0.3	CS	—	33.5	Auto	Manual	34.4 × 46.5 × 32.5	75

		TC1214	12.0	1.4 ~ C	0.3	C	31.37	*23.23	Manual	Manual	38.0 × 36.3	65
		TC1214DC	12.0	1.4 ~ 360	0.3	C	31.37	*23.23	Direct Drive	Manual	37.0 × 48.7 × 36.5	80
		TC1214AI	12.0	1.4 ~ 360	0.3	C	31.37	*23.23	Auto	Manual	37.0 × 48.7 × 36.5	80

*It is possible to use a lens of format 1/2" on a camera of format 1/3" with a CS-adaptor ring.



TC2814AI



TC0412AI



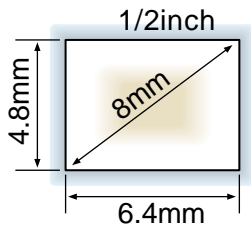
TC0812AI



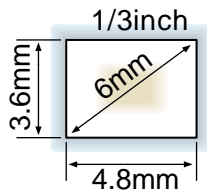
TC1214AI

TECHNICAL INFORMATION

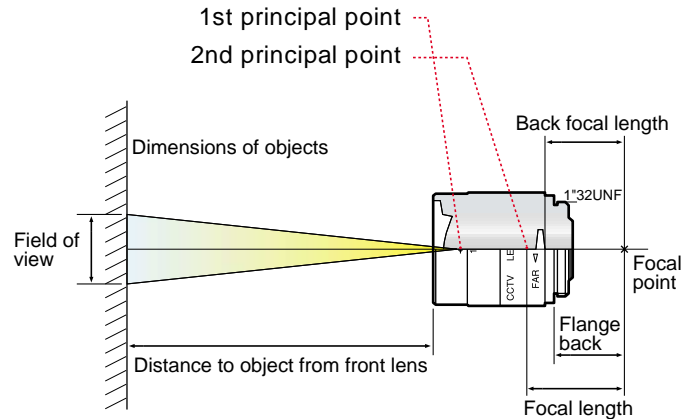
Image Format



Available lens:
For 1", 2/3 and 1/2" lenses



Available lens:
All lenses except 1/4" lenses



CCTV Lenses

(Closed circuit television lenses)

Today the term often means the lenses for small CCD cameras used in a wide range of applications.

Back focus

The distance from the rearmost point of a lens to the image focal point is called back focus.

Preset

Zoom focus is preset with a potentiometer used as a position sensor for presetting. It becomes possible that the desired focus zoom position set by the use of voltage can be called out by the controller.

Focal length

A focal length is the distance from the principal point (No. 2 principal point) to the focus on the optical axis. When a combination of CCTV lenses are assumed to be a single thin lens, the principal point is the center of the lens.

C mount / CS mount

These are the mounts for lenses of motion-picture cameras as specified by the JIS standard. The difference between the C mount and the CS mount is flange back only.

C mount	17.526mm
CS mount	12.5mm

Varifocal lens

The varifocal lens allows a free setting of the angle of view, although it requires focusing whenever the angle of view is changed.

Aperture

Aperture is generally expressed by F-number. The smaller the value of the focal length divided by the effective aperture, the brighter the image will be.

Flange back

Flange back is the distance from the surface (flange) where the lens comes in contact with the camera to the focal point.

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