## Lenses Varifocal lenses

#### **Features**

- CS-Mount
- DC Auto Iris
- Varifocal Options:
  - IR-Corrected
  - Megapixel



MPixel 1.3



3.0

#### Description

#### Varifocal lenses

Siqura® varifocal lenses are the ideal solution for almost all installations. Easily adjustable and easy to install, they require little or no knowledge and training. All varifocal lenses offer a maximum flexibility as they can be adjusted to match the exact scene required by the end user. All Siqura® lenses are auto—iris, direct drive lenses, so they can automatically control the picture's light and adjust to variations. The Siqura® varifocal lens series covers a wide range of views, from 1.8mm (almost fisheye) to 40mm for close-up views.

#### CS-mount

The Siqura<sup>®</sup> lenses are CS mount and fit on Siqura<sup>®</sup> BC-series CS mount cameras.\*

#### F-stop

A low f-stop or aperture, (e.g. f1.0), means the lens can pass more light, allowing the camera to produce a better image under dark conditions. However, a high f-stop will prevent the camera from "whitening" where there is a lot of light and gives a larger depth of field.

#### IR-corrected

"Day & Night" cameras, such as the Siqura® BC12, BC14WDR, BC62, and BC64, normally operate in the near-infrared/infrared zones at night. IR-corrected lenses are manufactured with special glass and coating. This combination allows the lens to deliver perfect focus in normal lighting and also under IR illumination by transmitting more light from the infrared region. As a result, refocusing is not required when using infrared lighting.

#### Megapixel

Megapixel lenses offer minimal distortion and therefore provide excellent optical performance from the center to the corners.

### Ordering Information

Model	Description
VL01	1/3", 1.8-3.6mm, f1.6, DC auto-iris
VL11	1/3", 2.9-8.2mm, f1.0, DC auto-iris
VL12	1/3", 2.9-8.2mm, f1.0, DC auto-iris, IR-corrected
VL22	1/3", 2.8-12mm, f1.3, DC auto-iris, IR-corrected
VL23	1/3", 2.8-12mm, f1.3, DC auto-iris, IR-corrected, 1.3 Megapixel
VL24	1/3", 3-8mm f1.2, auto-iris, IR-corrected, 3.0 Megapixel
VL31	1/3", 8.5-40mm, f1.3, DC auto-iris, IR-corrected
VL32	1/3", 5.0-50.0mm, f1.6, DC auto iris, IR-corrected, 1.3MP
VL34	1/2", 8.0-80.0mm, f1.6, DC auto iris, IR-corrected, 3.0MP

<sup>\*</sup> The VL-34 is a C-mount lens



## Lenses Technical specifications

## Varifocal standard resolution lenses

Optical	VL01	VL11	VL12	VL22	VL31		
IR-Corrected	- Yes						
Megapixel	-	-	-	-	-		
Mount	CS-Mount						
Focal Length (mm)	1.8-3.6	2.9-8.2	2.9-8.2	2.8-12	8.5-40		
Back Focal Length (mm) Tele	10.5	14.0	19.2	10.6			
Back Focal Length (mm) Wide	7.0	7.8	7.8	7.2	9.0		
Flange Back Length (mm)	12.5	12.5	12.5	12.5	12.5		
Maximum Aperture Ratio	1:1.6	1:1.0	1:1.0	1:1.3	1:1.3		
Effective Lens Aperture (mm) Front	ø22.0	ø18.8	ø19.0	ø23.0	ø27.0		
Effective Lens Aperture (mm) Rear	ø7.9	ø9.0	ø8.5	ø7.4	ø9.3		
Operation Range Iris	F1.6-F360C	F1.6-F360C	F1.0-F360C	F1.3-F360C	F1.3-F360C		
Maximum Image Format (mm)	4.8x3.6 (ø6)	4.8x3.6 (ø6)	4.8x3.6 (ø6)	4.8x3.6 (ø6)	4.8x3.6 (ø6)		
Operation Range Focus	0.2m-∞	0.5m-∞	0.5m-∞	0.3m-∞	0.8m-∞		
Operation Range Zoom	1.8-3.6 2.9-8.2 2.8-12 8.5-40						
Control Iris	Auto-Iris						
Control Focus	Manual						
Control Zoom	Manual						
Angle of View (°) with 1/3" Camera - D	173.8-99.0	133.9-44.2	125.6-44.7	133.0-29.7	43.9-8.9		
Angle of View (°) with 1/3" Camera - H	144.2-79.4	98.3-35.2	95.0	35.6	33.5-7.1		
Angle of View (°) with 1/3" Camera - V	109.4-59.6	70.7-26.3	69.0-26.7	74.2-17.8	24.4-5.3		
Supply Voltage	8-16 8.5-16						
Current (mA)	<35	<40	<40	<40	<40		
Response Time (sec.)	±2						
Light Weighting Method	Adjustable between average - Peak (Set to average at factory) / over case						
Input Signal	Video signal (V. or V.S.)						
Iris Accuracy	±15% at video signal level						
Sensitivity Adjustment	0.5 V (p-p) - 1.0 V (p-p) (Video Signal)						
Input Impedance	High						
Dimensions (mm)	ø37.4x42.6x51	ø33.5x46.6x44.3	ø33.5x46.6x44.3	ø37.5x48x56	ø41.7x57.5x62.9		
Weight (g)	83	54	54	74	115		
Operating Temperature (°C)	-20 to +50°C -10 to +50°C -20 to +50°C						







### Lenses Technical specifications

# Varifocal megapixel lenses

Optical	VL23	VL24	VL32	VL34		
IR-Corrected	Yes					
Megapixel	Yes					
Mount	CS-Mount C-Mount					
Focal Length (mm)	2.8-12	3-8	5-50	8-80		
Back Focal Length (mm) Tele	19.2	7.8	7.46	13.32		
Back Focal Length (mm) Wide	7.2	7.8	7.52	15.65		
Flange Back Length (mm)	12.5	12.5	12.5	17.526		
Maximum Aperture Ratio	1:1.3	1:1.2	1:1.6	1:1.6		
Effective Lens Aperture (mm) Front	ø23.0	ø20.9	ø26.0	ø38.0		
Effective Lens Aperture (mm) Rear	ø7.4	ø10.5	7.4ø	ø12.0		
Operation Range Iris	F1.3-F360C	F1.2-F360C	F1.6-T360	F1.6-T360		
Maximum Image Format (mm)	4.8x3.6 (ø6)	4.8x3.6 (ø6)	4.8x3.6 (ø6)	6.4x4.8 (ø8)		
Operation Range Focus	0.3m-∞	0.3m-∞	0.3m-∞	1.5m-∞		
Operation Range Zoom	2.8-12	3-8	5-50	8-80		
Control Iris	Auto-Iris					
Control Focus	Manual					
Control Zoom	Manual					
Angle of View (°) with a 1/3" Camera - D	133.0-29.7	115.8-43.9	75.95-5.67	43.47-4.09		
Angle of View (°) with a 1/3" Camera - H	102.2-23.7	90.7-35.2	51.17-5.30	34.58-3.32		
Angle of View (°) with a 1/3" Camera - V	74.2-17.8	67.3-26.5	39.36-4.07	26.35-2.39		
Supply Voltage	8.5-16	8.5-16	4.5-16	8.5-16		
Current (mA)	<40	<40	23			
Response Time (sec.)	±2					
Light Weighting Method	Adjustable between average - Peak (Set to average at factory) / over case					
Input Signal	Video signal (V. or V.S.)					
Iris Accuracy	±15% at video signal level					
Sensitivity Adjustment	0.5 V (p-p) - 1.0 V (p-p) (Video Signal)					
Input Impedance	High					
Dimensions (mm)	ø37.5x48x56	ø37x48.2x55	ø40.5x55.2x58.6	ø54.0x66.1x89.2		
Weight (g)	74	61	85			
Operating Temperature (°C)	-10 to +50°C					





