



# Auto-iris Motorized Zoom Lenses



- ▶ **High Quality Optics**
- ▶ **Reliable, Robust Construction**
- ▶ **1/3-inch Format with DC-iris Control**
- ▶ **1/2-inch Format with Video-iris Control**
- ▶ **6x, 10x, 15x, and 20x Zoom Ranges**
- ▶ **Optional Pre-positioning**
- ▶ **15x with Manual Override**

These Motorized Zoom Lenses are compact, rugged, 1/3-inch and 1/2-inch image format auto iris lenses. Their high sensitivity and reliability provide optimal performance in all environments.

The 1/3-inch DC-iris Series Lenses have been designed for more economical uses and are provided with a standard CS mount for use with a wide variety of cameras.

The 1/2-inch Video-iris Series are high quality lenses, and are provided with both CS and C mount options.

## Functions

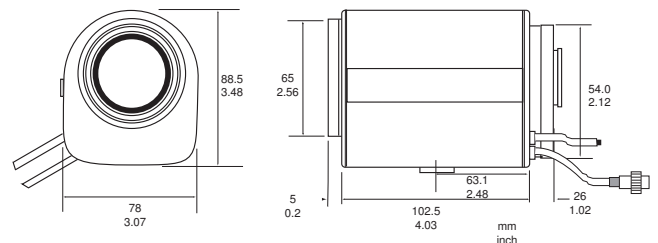
For the auto iris control, all lenses use the standard 4-pin EIAJ connector which fits directly into the camera's iris output. For zoom, focus, and pre-position control, the lenses are fitted with an 8-pin DIN connector.

Impressive optical quality is a result of combined high standards for resolution, contrast reproduction, and lens coating. The lenses have been designed to match with the complete range of Bosch cameras. When used in combination with the 1/2-inch Series cameras they provide the necessary large F/stop and high quality camera optic features.

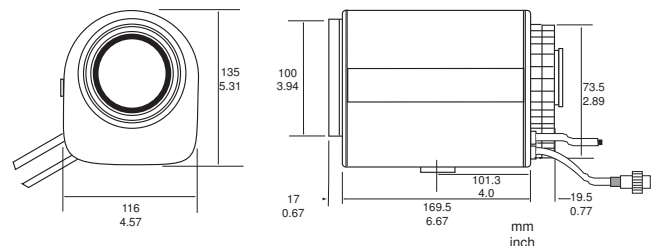
Lenses in this series include 6x, 10x, 15x, and 20x zoom range models. Some models provide optional pre-position and manual iris override functions.

The mechanical construction has been designed to withstand the frequent control operations of the iris, zoom, and focus operations. For a cost effective lens that provides the high quality and reliability needed to enhance camera images, these lenses are the ideal solution.

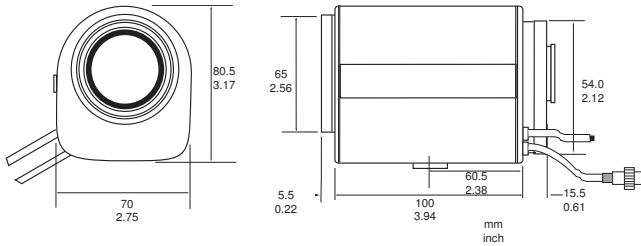
## Installation/Configuration Notes



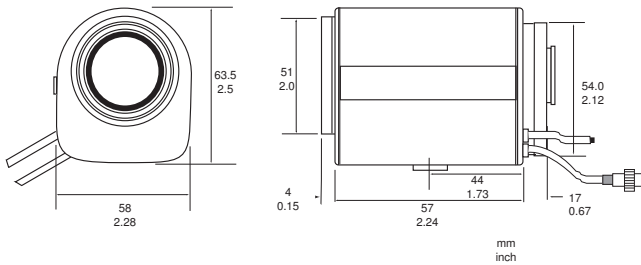
Dimensions LTC 3293 / 20 & LTC 3293 / 30



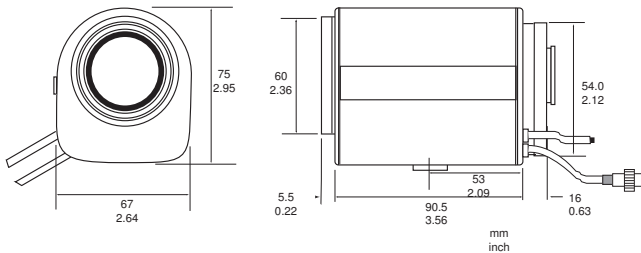
Dimensions LTC 3293 / 40 & LTC 3293 / 50



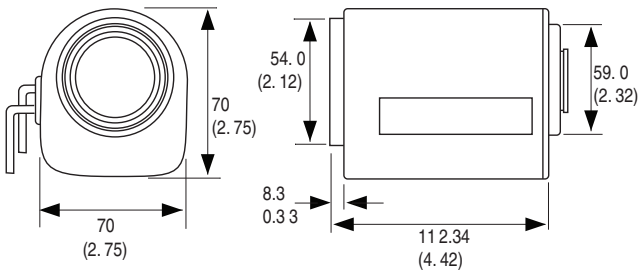
Dimensions LTC 3283/50



Dimensions LTC 3283/20



Dimensions LTC 3283/40



Dimensions LTC 3384/21

**Ordering Information**

<b>LTC 3384/21 Zoom Lens</b> 1/3-inch, 6 – 60 mm, DC-iris, CS-mount F1.4-360, 4-pin	<b>LTC3384/21</b>
<b>LTC 3293/20 Zoom Lens</b> 1/2-inch, 8 – 120 mm, Video-iris, C-mount F1.6-1000, 4-pin	<b>LTC3293/20</b>
<b>LTC 3293/30 Zoom Lens</b> 1/2-inch, 8 – 120 mm, Video-iris, C-mount F1.6-1000, 4-pin, pre-position and manual override	<b>LTC3293/30</b>
<b>LTC 3293/40 Zoom Lens</b> 1/2-inch, 12 – 240 mm, Video-iris, C-mount F1.6-720, 4-pin	<b>LTC3293/40</b>
<b>LTC 3293/50 Zoom Lens</b> 1/2-inch, 12 – 240 mm, Video-iris, C-mount F1.6-720, 4-pin, pre-position	<b>LTC3293/50</b>
<b>LTC 3283/20 Zoom Lens</b> 1/2-inch, 8.0 – 48 mm, Video-iris, CS-mount F1.4-360, 4-pin	<b>LTC3283/20</b>
<b>LTC 3283/40 Zoom Lens</b> 1/2-inch, 7.5 – 75 mm, Video-iris, CS-mount F1.4-360, 4-pin	<b>LTC3283/40</b>
<b>LTC 3283/50 Zoom Lens</b> 1/2-inch, 7.5 – 75 mm, Video-iris, C-mount F1.2-512, 4-pin, pre-position	<b>LTC3283/50</b>

**Accessories**

<b>S1374 Adapter</b> converts C mount lens to CS mount camera	<b>S1374</b>
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mm  
in.

## Auto-iris Motorized Zoom Lenses



	LTC3384/21	LTC3293/20	LTC3293/30	LTC3293/40
<b>Image format</b>	1/3-inch	1/2-inch	1/2-inch	1/2-inch
<b>Zoom</b>	10x	15x	15x	20x
<b>Focal length</b>	6 - 60 mm	8 - 120 mm	8 - 120 mm	12 - 240 mm
<b>Iris range</b>	F1.4-360	F1.6-1000	F1.6-1000	F1.6-720
<b>Min. object distance</b>	1.3 m	1.5 m	1.5 m	2.8 m
<b>Pre-position</b>	N/A	N/A	Yes	N/A
<b>Manual override</b>	N/A	N/A	Yes	N/A
<b>Lens mount</b>	CS	C	C	C
<b>Dimensions</b>	See drawing	see drawing	see drawing	see drawing
<b>Weight</b>	380 g (0.84 lb)	800 g (1.76 lb)	800 g (1.76 lb)	2630 g (5.79 lb)
<b>Temp. range</b>	-5°C to +50°C +23°F to 122°F	-10°C to +50°C (+14°F to 22°F)	-10°C to +50°C +14°F to 122°F	-10°C to +50°C +14°F to 122°F

## Iris characteristics

<b>Iris control</b>	4-pin video iris	4-pin video iris	4-pin video iris	4-pin video iris
<b>Operating voltage</b>	8 - 12 VDC	8 - 12 VDC	8 - 12 VDC	8 - 12 VDC
<b>Response speed</b>	Approx.2 s	Approx.1.5 s	Approx.1.5 s	Approx.1.5 s
<b>Operating current</b>	70 mA (max.)	50 mA (max.)	50 mA (max.)	50 mA (max.)
<b>Input signal</b>	VS or V	VS or V	VS or V	VS or V
<b>Impedance</b>	10 kOhm	10 kOhm	10 kOhm	10 kOhm
<b>Iris accuracy</b>	Approx.8 s	+20% (signal level)	+20% (signal level)	+20% (signal level)
<b>Sensitivity</b>	0.5-1.0 Vp-p	0.5-1.0 Vp-p	0.5-1.0 Vp-p	0.5-1.0 Vp-p

## Zoom characteristics

<b>Zoom control</b>	Motor drive	Motor drive	Motor drive	Motor drive
<b>Motorized spd.(app.)</b>	8 s	6 sec	6 sec	10 sec
<b>Operating voltage</b>	12 VDC	12 VDC	12 VDC	12 VDC
<b>Operating current</b>	70 mA (max.)	55 mA (max.)	55 mA (max.)	55 mA (max.)

## Focus characteristics

<b>Focus control</b>	Motor drive	Motor drive	Motor drive	Motor drive
<b>Motorized spd.(app.)</b>	5.5 s	8 sec	8 sec	10 sec
<b>Operating voltage</b>	12 VDC	12 VDC	12 VDC	12 VDC
<b>Operating current</b>	55 mA (max.)	55 mA (max.)	55 mA (max.)	55 mA (max.)

Auto-iris Motorized Zoom Lenses



LTC3384/21

LTC3293/20

LTC3293/30

LTC3293/40

Angle of view 1/3-inch camera (Wide - Tele)

Horizontal	43.4°-4.5°	32°56'-2°20'	32°56'-2°20'	23°01'-1°10'
Vertical	32.7°-3.5°	24°49'-1°45'	24°49'-1°45'	17°13'-0°52'

Angle of view 1/2 -inch camera (Wide - Tele)

Horizontal	-	43°29'-3°05'	43°29'-3°05'	30°52'-1°33'
Vertical	-	32°56'-2°20'	32°56'-2°20'	23°01'-1°10'

## Auto-iris Motorized Zoom Lenses



	LTC3293/50	LTC3283/20	LTC3283/40	LTC3283/50
<b>Image format</b>	1/2-inch	1/2-inch	1/2-inch	1/2-inch
<b>Zoom</b>	20x	6x	10x	10x
<b>Focal length</b>	12 - 240 mm	8 - 48 mm	7.5 - 75 mm	7.5 - 75 mm
<b>Iris range</b>	F1.6-720	F1.4-360	F1.4-360	F1.2-512
<b>Min. object distance</b>	2.8 m	1.8 m	1.8 m	1.8 m
<b>Pre-position</b>	Yes	N/A	N/A	Yes
<b>Manual override</b>	N/A	N/A	N/A	N/A
<b>Lens mount</b>	C	CS	CS	C
<b>Dimensions</b>	see drawing	see drawing	see drawing	see drawing
<b>Weight</b>	2630 g (5.79 lb)	400 g (0.88 lb)	580 g (1.28 lb)	740 g (1.63 lb)
<b>Temp. range</b>	-10°C to +50°C +14°F to 122°F	-10°C to +50°C +14°F to 122°F	-10°C to +50°C +14°F to 122°F	-10°C to +50°C +14°F to 122°F

## Iris characteristics

<b>Iris control</b>	4-pin video iris	4-pin video iris	4-pin video iris	4-pin video iris
<b>Operating voltage</b>	8 - 12 VDC	8 - 12 VDC	8 - 12 VDC	8 - 12 VDC
<b>Response speed</b>	Approx.1.5 s	Approx.1.5 s	Approx.1.5 s	Approx.1.5 s
<b>Operating current</b>	50 mA (max.)	50 mA (max.)	50 mA (max.)	50 mA (max.)
<b>Input signal</b>	VS or V	VS or V	VS or V	VS or V
<b>Impedance</b>	10 kOhm	10 kOhm	10 kOhm	10 kOhm
<b>Iris accuracy</b>	+20% (signal level)	+20% (signal level)	+20% (signal level)	+20% (signal level)
<b>Sensitivity</b>	0.5-1.0 Vp-p	0.5-1.0 Vp-p	0.5-1.0 Vp-p	0.5-1.0 Vp-p

## Zoom characteristics

<b>Zoom control</b>	Motor drive	Motor drive	Motor drive	Motor drive
<b>Motorized spd.(app.)</b>	10 sec	5 s	5.5 s	5.5 s
<b>Operating voltage</b>	10 sec	12 VDC	12 VDC	12 VDC
<b>Operating current</b>	55 mA (max.)	55 mA (max.)	55 mA (max.)	55 mA (max.)

## Focus characteristics

<b>Focus control</b>	Motor drive	Motor drive	Motor drive	Motor drive
<b>Motorized spd.(app.)</b>	10 sec	5 s	6.5 s	5.5 s
<b>Operating voltage</b>	12 VDC	12 VDC	12 VDC	12 VDC
<b>Operating current</b>	55 mA (max.)	55 mA (max.)	55 mA (max.)	55 mA (max.)

Auto-iris Motorized Zoom Lenses



LTC3293/50



LTC3283/20



LTC3283/40



LTC3283/50

Angle of view 1/3-inch camera (Wide – Tele)

<b>Horizontal</b>	23°01' - 1°10'	32°42' - 5°05'	34°38' - 3°46'	34°57' - 3°46'
<b>Vertical</b>	17°13' - 0°52'	24°40' - 4°23'	26°81' - 2°50'	26°27' - 2°50'

Angle of view 1/2 -inch camera (Wide – Tele)

<b>Horizontal</b>	30°52' - 1°33'	42°47' - 7°43'	45°11' - 4°58'	45°38' - 5°00'
<b>Vertical</b>	23°01' - 1°10'	32°42' - 5°50'	34°38' - 3°46'	34°57' - 3°46'

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