



Fixed Focal-length Lenses



- ▶ High quality optics
- ▶ DC-iris types (direct drive)
- ▶ Reliable, robust DC-iris mechanism
- ▶ 1/3-inch and 1/2-inch formats
- ▶ Standard CS-mounts
- ▶ Standard 4-pin miniature plug for simple connection

As CCTV cameras become more reliable and maintenance-free through the use of solid-state charge-coupled device (CCD) technology, the lenses also need to have the same high standards of quality and reliability.

The range of Fixed Focal-length Lenses meets these tough requirements by providing long and reliable operation with no maintenance. Comprising DC-IRIS and video-iris types, the lens range from wide-angle to telephoto to cover virtually all applications in CCTV observation systems.

Functions

Designed for easy installation onto a wide variety of CCTV cameras, they are available for cameras with 1/3" and 1/2" image sensor formats. The extent of the range of lenses means that an installer will always be able to select the most appropriate lens for both camera and application. DC-iris and video-iris lenses include manual focus adjustment types and can be used in applications with widely varying lighting conditions. These lenses are available with a standard 4-pin connector.

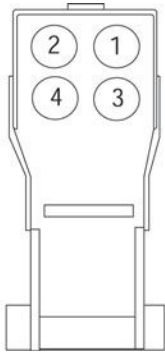
Installation/Configuration Notes

Choosing the correct lens

There is a simple relationship between the required field of view and the focal length of the lens to be used (see Field of View figure).

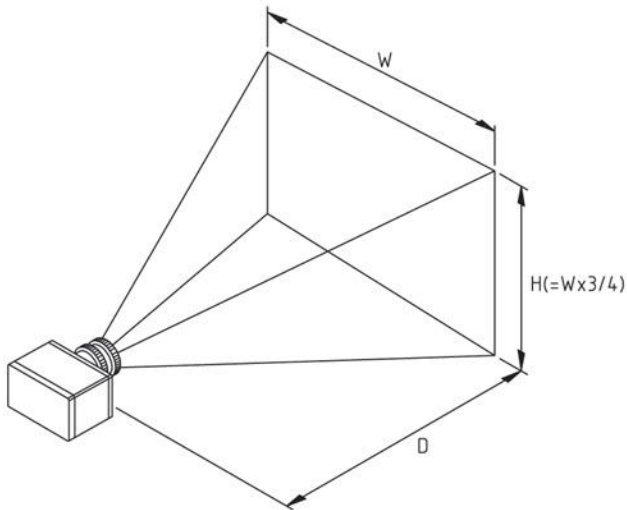
To determine this:

- Estimate or measure the maximum width "W" of the field of view.
- Estimate or measure the distance "D" between the camera and the object to be viewed.
- For 1/3" lens, use Graph 1 and for 1/2" lens use Graph 2. Find the point on the graph for the lens and the sensor format corresponding to the "W" and "D" coordinates. To ensure complete coverage of the object, select the lens indicated by the line above this object. Normally, for optimum coverage of the field of view, 1/3" and 1/2" lenses are used with camera heads with 1/3" and 1/2" format sensors respectively. However, 1/2" lens may be used with 1/3" cameras but the outer areas of the field of view of the lens will not be seen by the sensor.

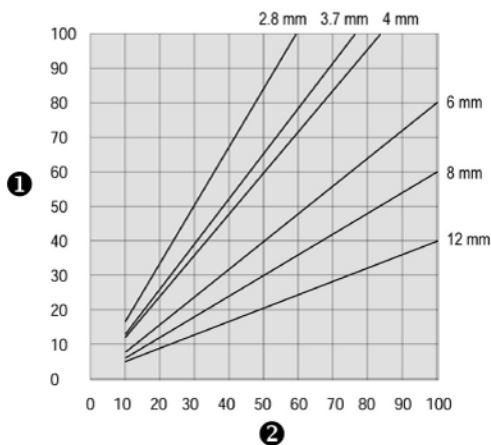


4-pin DC-iris Connector (Front view)

- Pin 1: Damping coil -
- Pin 2: Damping coil +
- Pin 3: Driving coil + (open)
- Pin 4: Driving coil -

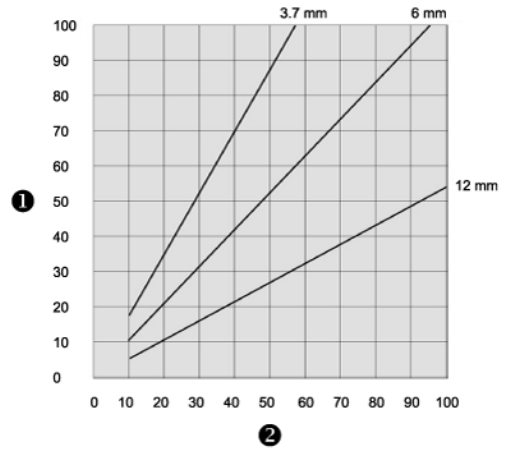


Field of view



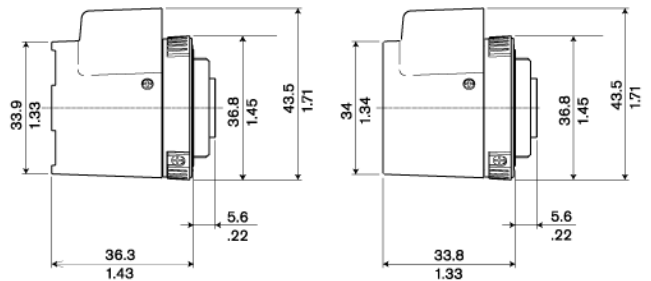
Graph 1 - Field of view (1/3-inch cameras)

- 1 Object width (m)
- 2 Object distance (m)

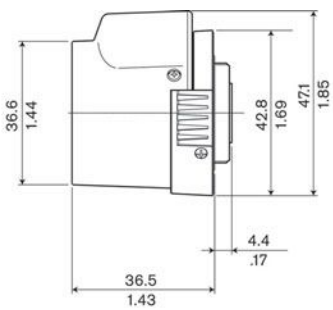


Graph 2 - Field of view (1/2-inch cameras)

- 1 Object width (m)
- 2 Object distance (m)



Dimensions LTC 3314/21 LTC 3334/21 & LTC 3344/21
In mm (inch)



Dimensions LTC 3214/20, LTC 3234/20 & LTC 3244/20
In mm (inch)

Ordering Information

LTC 3314/21 Fixed Focal-length Lens LTC3314/21
1/3-inch, 2.8 mm, direct drive, CS-mount
F1.2-100, 4-pin

Ordering Information

LTC 3334/21 Fixed Focal-length Lens 1/3-inch, 4 mm, direct drive, CS-mount F1.2-100, 4-pin	LTC3334/21
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LTC 3344/21 Fixed Focal-length Lens 1/3-inch, 8 mm, direct drive, CS-mount F1.2-100, 4-pin	LTC3344/21
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LTC 3214/20 Fixed Focal-length Lens 1/2-inch, 3.7 mm, direct drive, CS-mount F1.6-300, 4-pin	LTC3214/20
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LTC 3234/20 Fixed Focal-length Lens 1/2-inch, 6 mm, direct drive, CS-mount F1.4-300, 4-pin	LTC3234/20
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LTC 3244/20 Fixed Focal-length Lens 1/2-inch, 12 mm, direct drive, CS-mount F1.4-300, 4-pin	LTC3244/20
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Accessories

S1374 Adapter converts C mount lens to CS mount camera	S1374
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Fixed Focal-length Lenses



LTC3314/21



LTC3334/21



LTC3344/21



LTC3214/20

Image format	1/3 inch	1/3 inch	1/3 inch	1/2 inch
Focal length	2.8 mm	4 mm	8 mm	3.7 mm
Iris range	F1.2 - 200	F1.2 - 200	F1.2 - 200	F1.6 - 300
Min. Object Distance	0.3 m (1 ft)	0.3 m (1 ft)	0.3 m (1 ft)	0.2 m (0.65 ft)
Weight	52 g (.115 lb)	49 g (1.08 lb)	44 g (.097 lb)	57 g (.12 lb)
Lens mount	CS-mount	CS-mount	CS-mount	CS-mount
Angle of view (1/2")	N/A	N/A	N/A	95 X 73
Angle of view (1/3")	94 X 72	64 X 49	33 X 25	73 X 54
Focus control	manual	manual	manual	manual
4-pin conn.	DC-IRIS	DC-IRIS	DC-IRIS	DC-IRIS



LTC3234/20



LTC3244/20

Image format	1/2 inch	1/2 inch
Focal length	6 mm	12 mm
Iris range	F1.4 - 300	F1.4 - 300
Min. Object Distance	0.2 m (0.65 ft)	0.3 m (1 ft)
Weight	60 g (.13 lb)	46 g (.1 lb)
Lens mount	CS-mount	CS-mount
Angle of view (1/2")	58 X 45	30 X 23
Angle of view (1/3")	45 X 34	23 X 17
Focus control	manual	manual
4-pin conn.	DC-IRIS	DC-IRIS

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