iVu Series Lens Kits

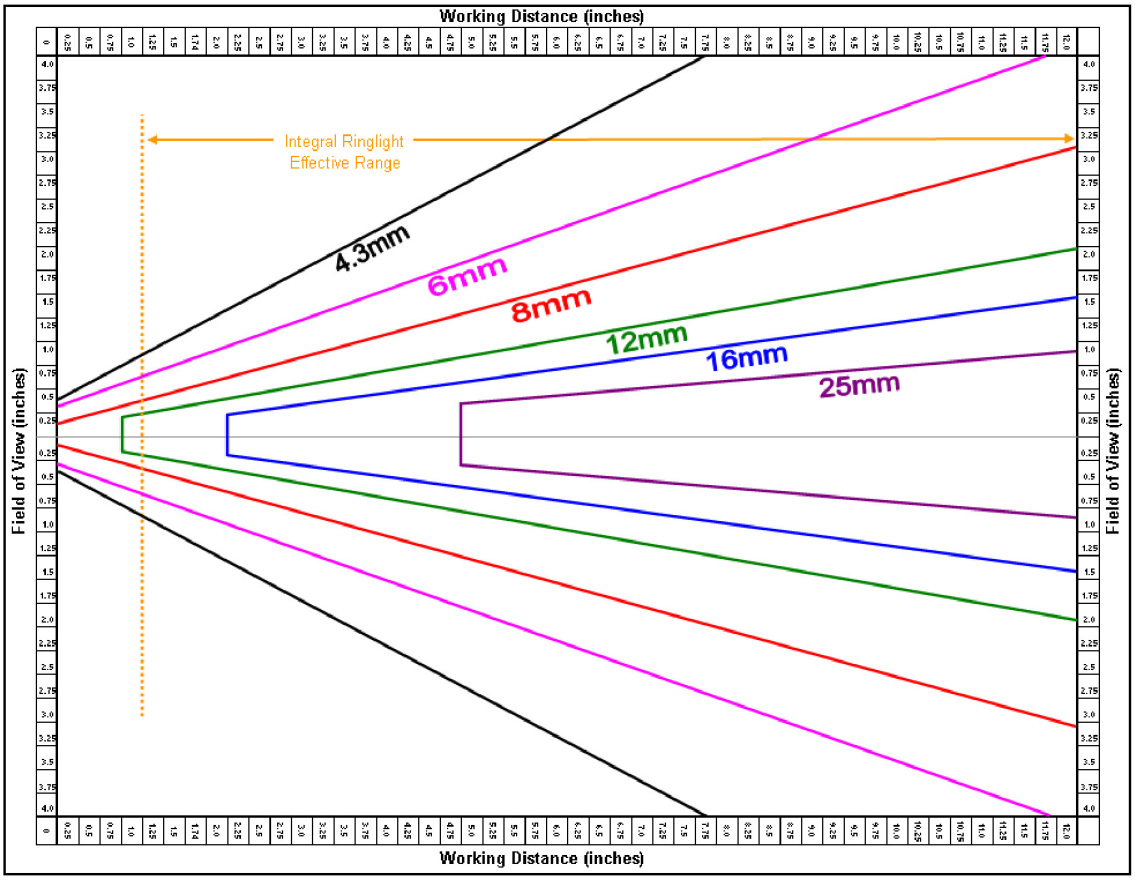
For use with iVu Series Image Sensors

This document describes how to install lenses in the iVu Series sensor.

Micro Video Lens Models

Model	Lens Description
LMF04 [1]	4.3 mm lens
LMF06	6 mm lens
LMF08	8 mm lens
LMF12	12 mm lens
LMF16	16 mm lens
LMF25	25 mm lens

Lens Chart



[1] Due to the flexibility of the replaceable lenses, focus mechanism, and imager field-of-view settings, it is possible with the 4.3 mm lens to experience reflections from the internal strobe on the inspection image. To eliminate this effect, the field-of-view can be limited to the system default of 320×240 (or 640×480 for fine), the working distance to the object should be no more than about 8 inches, or an external strobe should be used instead of the internal ring light.

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C-Mount Lens Models

Model	Lens Description
LCF04	4 mm Lens - no threads for filter
LCF08	8 mm Lens - no threads for filter
LCF12	12 mm Lens - no threads for filter
LCF16	16 mm Lens, aperture lock - no threads for filter
LCF25R	25mm lens
LCF25LR	25mm lens with focus locking
LCF50L1R	50mm lens with focus locking, plastic
LCF50L2R	50mm lens with focus locking, metal (will not fit ring)
LCF75LR	75mm lens with focus locking, metal (will not fit ring)

Installing Lenses on the iVu Series Sensor

Installing a Lens on the Micro Video Lens Model

To install a lens on the iVu Series sensor with a Micro Video Lens, use the illustration as a guide and follow the steps listed below.

CAUTION: Failure to follow these instructions may cause damage to your iVu Series sensor.

Micro Video Lens Models



A	Lens
B	Focusing Window
C	Locking Clip
D	Locking Screw
E	Filter Cap (optional)
F	Filter (optional)

NOTE: Filter Kits are available separately.

1. Remove the Focusing Window locking screw (D) using the 1/16 in. hex key.

   NOTE: The Locking Clip (C) inserts in a groove near the top of the Focusing Window (B). When removing the window, the Locking Clip will be loose. Be careful not to lose the clip while removing the window.

2. Unscrew the Focusing Window by turning it clockwise approximately 5 complete turns or until the Focusing Window disengages from the light/lens assembly.

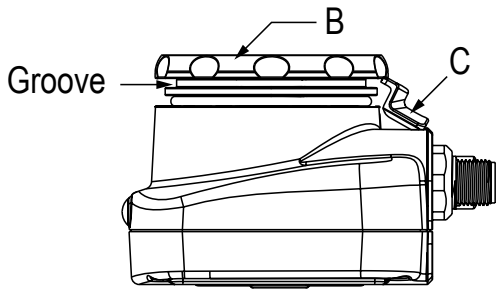
   NOTE: The light/lens assembly may include an integrated ring light or a blank disk if an integrated ring light is not used. Be careful that the light/lens assembly does not pull out when removing the Focusing Window. Give a slight tug on the Focusing Window when you think you've unscrewed it far enough. If the lens assembly moves with the window, continue to rotate the window clockwise until the lens assembly does not move.

3. Set the Focusing Window aside. Be careful not to get any debris on the window's O-ring.

4. Unthread the existing lens and remove from the light/lens assembly.
5. Thread the new lens onto the light/lens assembly.

Attention: Avoid getting fingerprints on the lens. If necessary, carefully clean the lens with an appropriate lens cleaner.

6. After the lens is installed, place the Focusing Window back into the housing while inserting the Locking Clip into the groove as shown.

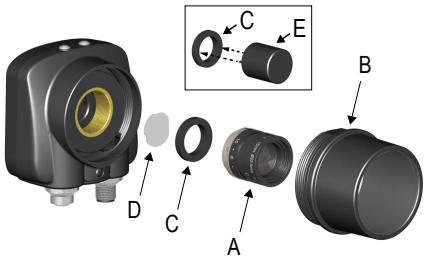


7. Press the Focusing Window onto the housing to make sure that it seats correctly (no gap between the window and housing). Rotate the window counter-clockwise at least two turns.
8. Replace the locking tab screw but do not tighten until you have set up and focused the sensor again.

Installing a Lens on the C-Mount Lens Model

To install a lens on the iVu Series sensor with C-Mount Lens, use the illustration as a guide and follow the steps listed below.

CAUTION: Failure to follow these instructions may cause damage to your iVu Series sensor.

C-Mount Models		
	A	C-Mount Lens
	B	Lens Enclosure
	C	Retainer Ring (optional)
	D	Filter (optional)
	E	Filter Retainer Ring Tool
	NOTE: Filter Kits are available separately.	

1. Remove the Lens Enclosure and Lens.
2. Install filter behind the retainer ring. Make sure it is fully seated.
3. Using the provided retainer ring tool, thread the retainer ring into the sensor until it firmly seats the filter.
4. Replace the Lens and Lens Enclosure on the camera.

CAUTION: Electrostatic Discharge

Avoid the damage that electrostatic discharge (ESD) can cause to the Sensor.

Always use a proven method for preventing electrostatic discharge when installing a lens or attaching a cable.

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