

Part number:

55001-0302

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Customer support

<http://support.flir.com>

Legal disclaimer

Specifications subject to change without further notice. Camera models and accessories subject to regional market considerations. License procedures may apply.

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Imaging and optical data

IR resolution	640 x 480 pixels
Thermal sensitivity/NETD	< 0.03°C @ +30°C (+86°F) / 30 mK
Field of view (FOV) / Minimum focus distance	25° x 19° (31° diagonal) / 0.25 m (0.82 ft.)
Focal length	24.6 mm (0.97 in.)
Spatial resolution (IFOV)	0.68 mrad
Lens identification	Automatic
F-number	1.0
Image frequency	50 Hz (100/200 Hz with windowing)
Focus	Automatic or manual (built in motor)

Detector data

Focal Plane Array (FPA) / Spectral range	Uncooled microbolometer / 7.5–14 μm
Detector pitch	17 μm
Detector time constant	Typical 8 ms

Measurement

Object temperature range	-40°C to +150°C (-40°F to +302°F) 100 to +650°C (+212 to +1202°F)
Accuracy	±2°C (±3.6°F) or ±2% of reading

Measurement analysis

Atmospheric transmission correction	Automatic, based on inputs for distance, atmospheric temperature and relative humidity
Optics transmission correction	Automatic, based on signals from internal sensors
Emissivity correction	Variable from 0.01 to 1.0
Reflected apparent temperature correction	Automatic, based on input of reflected temperature
External optics/windows correction	Automatic, based on input of optics/window transmission and temperature
Measurement corrections	Global object parameters

USB

USB	<ul style="list-style-type: none"> Control and image
USB, standard	USB 2 HS
USB, connector type	<ul style="list-style-type: none"> USB Mini-B
USB, communication	TCP/IP socket-based FLIR proprietary
USB, image streaming	16-bit 640 x 480 pixels @ 25 Hz - Signal linear - Temperature linear - Radiometric
USB, protocols	TCP, UDP, SNMP, RTSP, RTP, HTTP, ICMP, IGMP, ftp, SMTP, SMB (CIFS), DHCP, MDNS (Bonjour), uPnP

Ethernet

Ethernet	Control and image
Ethernet, type	Gigabit Ethernet
Ethernet, standard	IEEE 802.3

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Ethernet

Ethernet, connector type	RJ-45
Ethernet, communication	TCP/IP socket-based FLIR proprietary and GenICam protocol
Ethernet, image streaming	16-bit 640 × 480 pixels @ 50 Hz 16-bit 640 × 240 pixels @ 100 Hz 16-bit 640 × 120 pixels @ 200 Hz - Signal linear - Temperature linear - Radiometric GigE Vision and GenICam compatible
Ethernet, protocols	TCP, UDP, SNTP, RTSP, RTP, HTTP, ICMP, IGMP, ftp, SMTP, SMB (CIFS), DHCP, MDNS (Bonjour), uPnP

Digital input/output

Digital input, purpose	Image tag (start, stop, general), Image flow ctrl. (Stream on/off), Input ext. device (programmatically read)
Digital input	2 opto-isolated, 10–30 VDC
Digital output, purpose	Output to ext. device (programmatically set)
Digital output	2 opto-isolated, 10–30 VDC, max 100 mA
Digital I/O, isolation voltage	500 VRMS
Digital I/O, supply voltage	12/24 VDC, max 200 mA
Digital I/O, connector type	6-pole jackable screw terminal

Power system

External power operation	12/24 VDC, 24 W absolute max
External power, connector type	2-pole jackable screw terminal
Voltage	Allowed range 10–30 VDC

Environmental data

Operating temperature range	–15°C to +50°C (+5°F to +122°F)
Storage temperature range	–40°C to +70°C (–40°F to +158°F)
Humidity (operating and storage)	IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F)
EMC	<ul style="list-style-type: none"> EN 61000-6-2:2001 (Immunity) EN 61000-6-3:2001 (Emission) FCC 47 CFR Part 15 Class B (Emission)
Encapsulation	IP 30 (IEC 60529)
Bump	25 g (IEC 60068-2-29)
Vibration	2 g (IEC 60068-2-6)

Physical data

Weight	0.90 kg (1.98 lb.)
Camera size (L × W × H)	216 × 73 × 75 mm (8.5 × 2.9 × 3.0 in.)
Tripod mounting	UNC ¼"-20 (on three sides)
Base mounting	2 × M4 thread mounting holes (on three sides)
Housing material	Aluminum
Comments to physical data	Outline dimensional drawings and STEP files can be found at http://support.flir.com



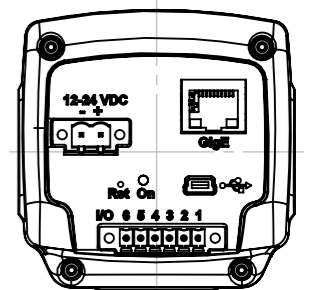
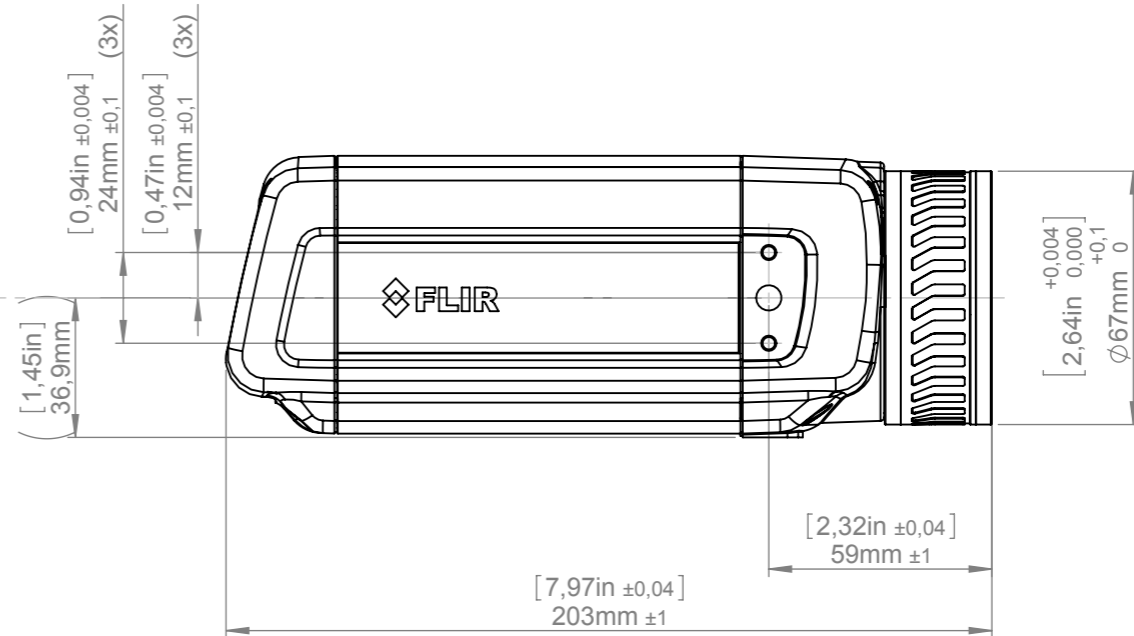
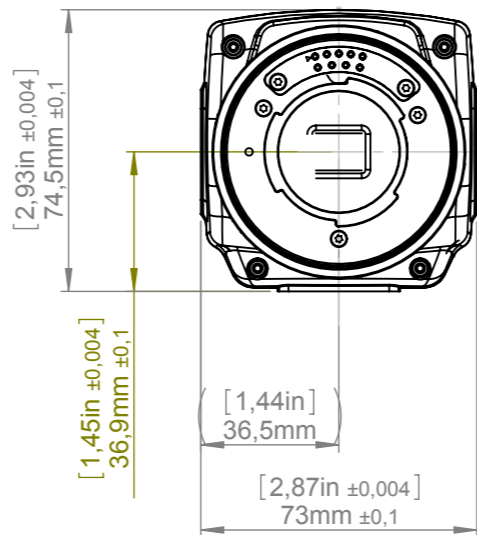
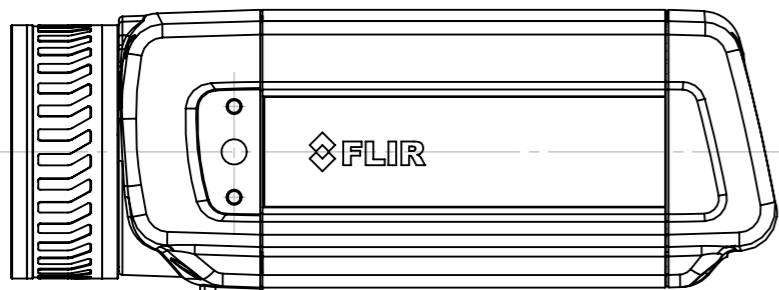
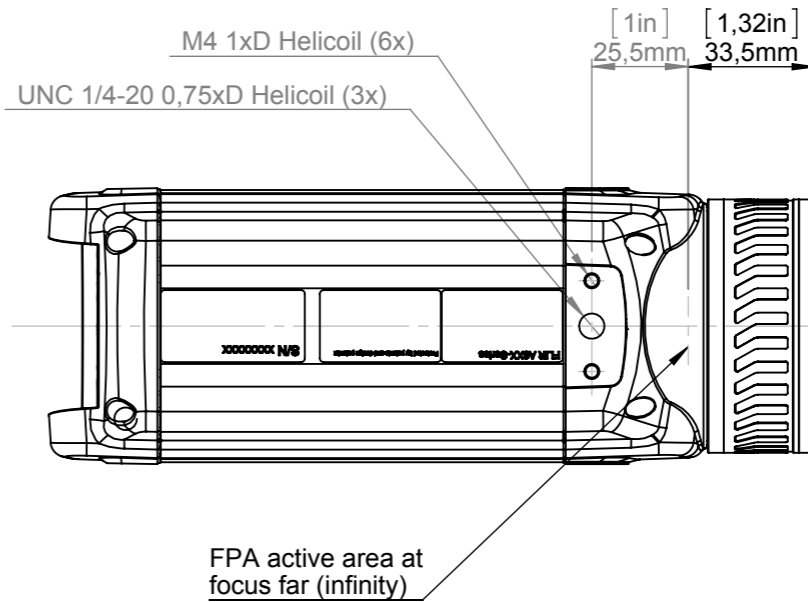
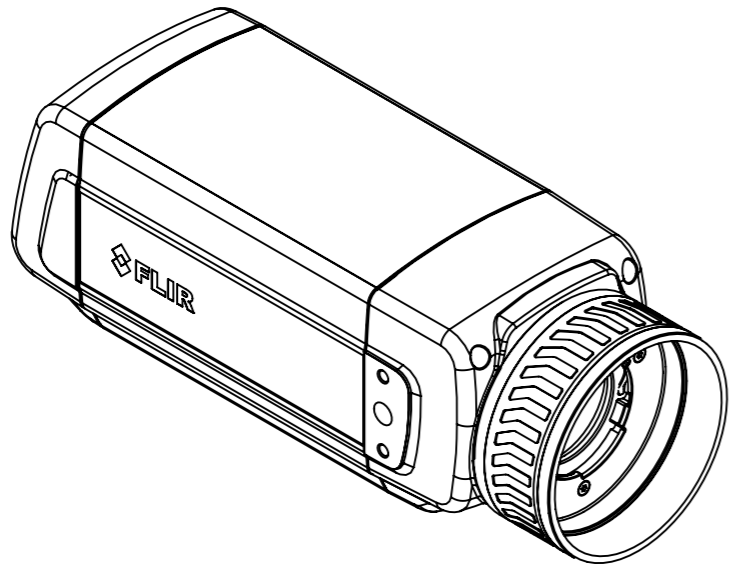
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Shipping information

- Infrared camera with lens
 - Calibration certificate
 - Downloads brochure
 - Ethernet™ cable
 - FLIR apps card
 - FLIR ResearchIR scratchcard
 - FLIR Tools download card
 - Getting Started Guide
 - Hard transport case
 - Important Information Guide
 - Mains cable
 - Optics brochure
 - Power cable, pig-tailed
 - Power supply
 - Service & training brochure
 - Thank you card
 - USB cable
 - User documentation CD-ROM
 - Utility CD-ROM
 - Warranty extension card
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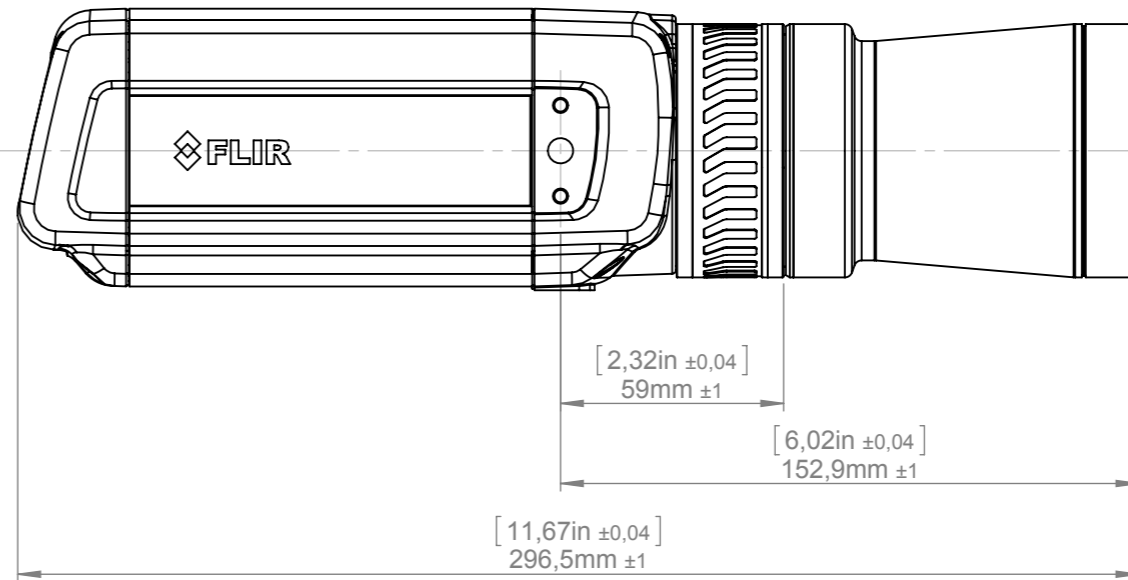
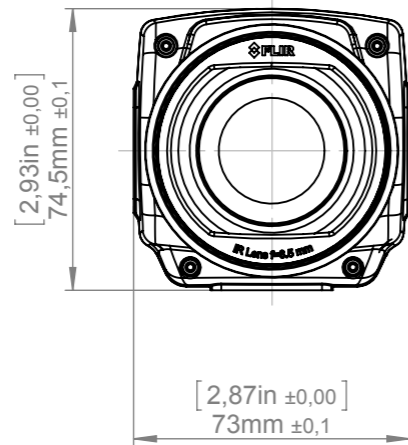
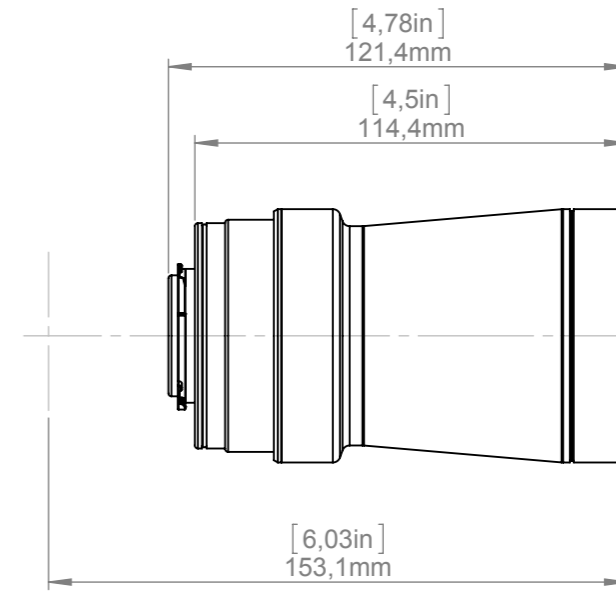
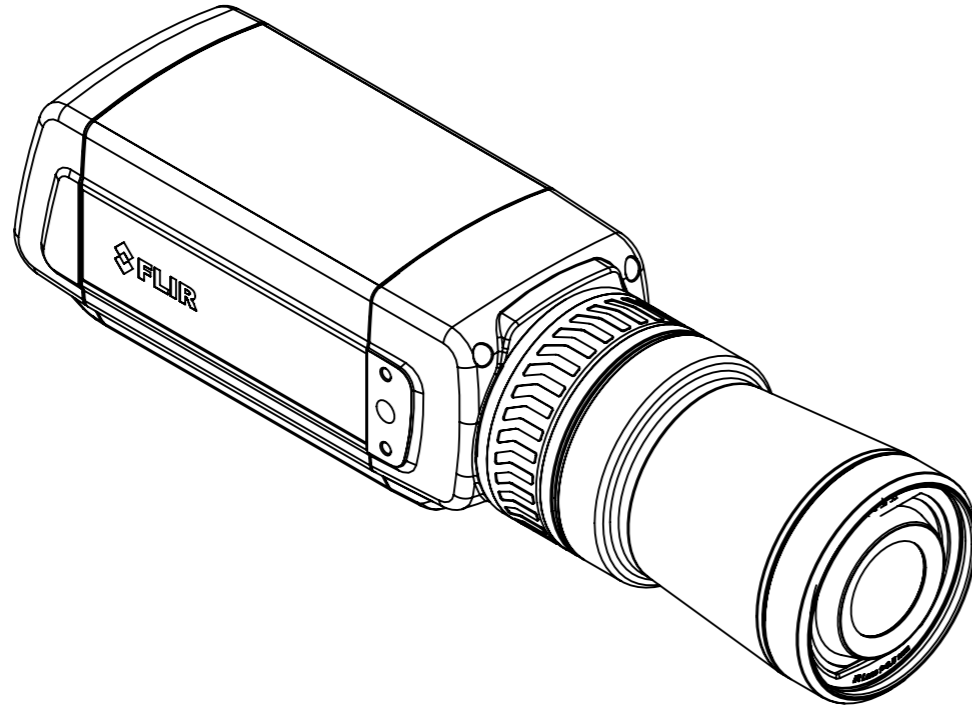
Camera housing



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Denomination			
Basic dimensions FLIR A/SC 6xx			Drawing No. T126925 Size A

Camera with Lens IR f=6,5 mm (80°)

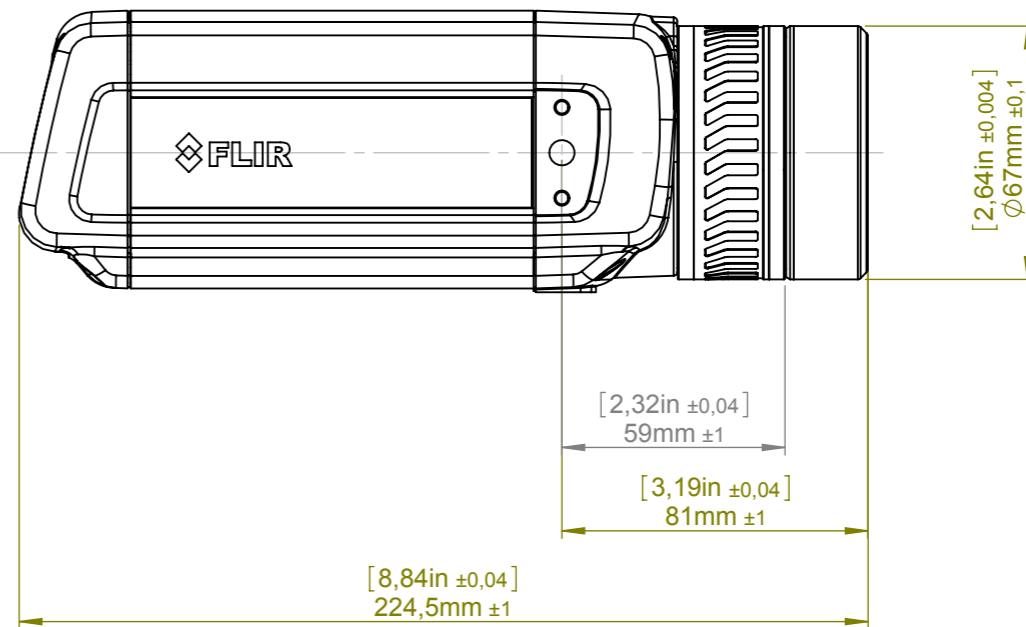
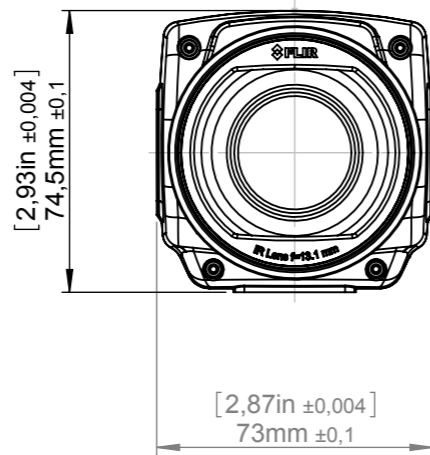
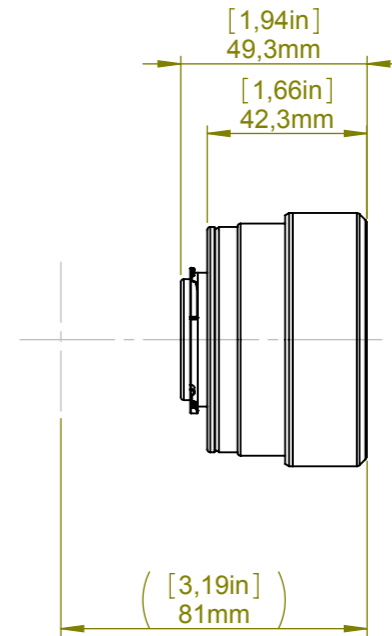
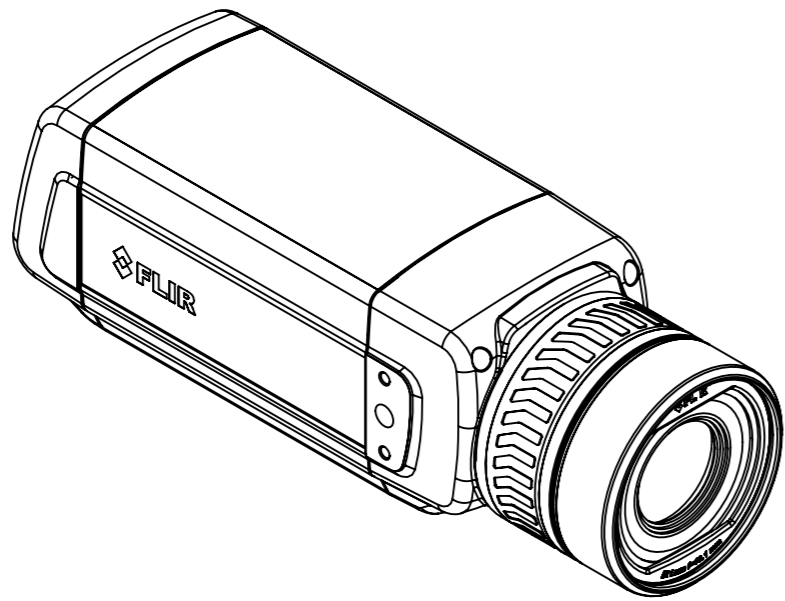


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For additional dimensions see page 1

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Size A3	Scale 1:2	Sheet 2(9)	
Drawing No. T126925		Size A	

Camera with Lens IR f=13,1 mm (45°)

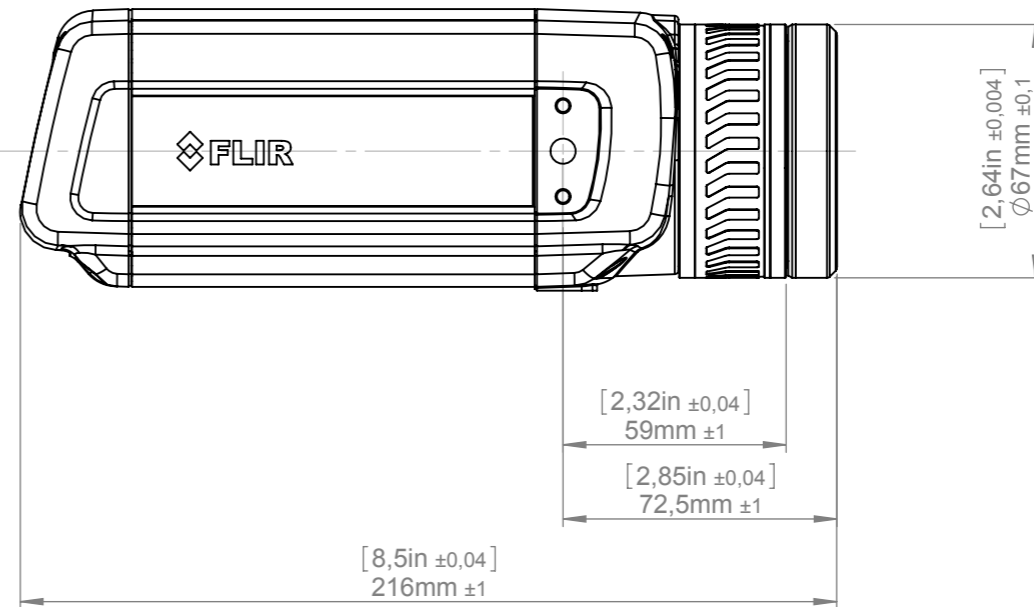
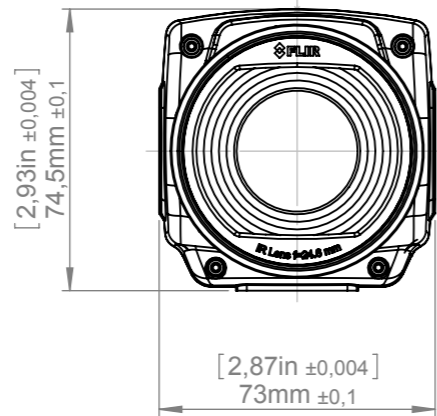
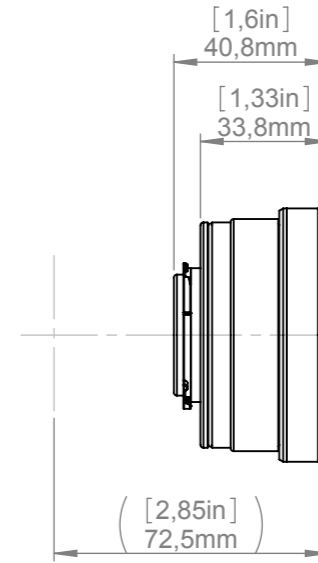
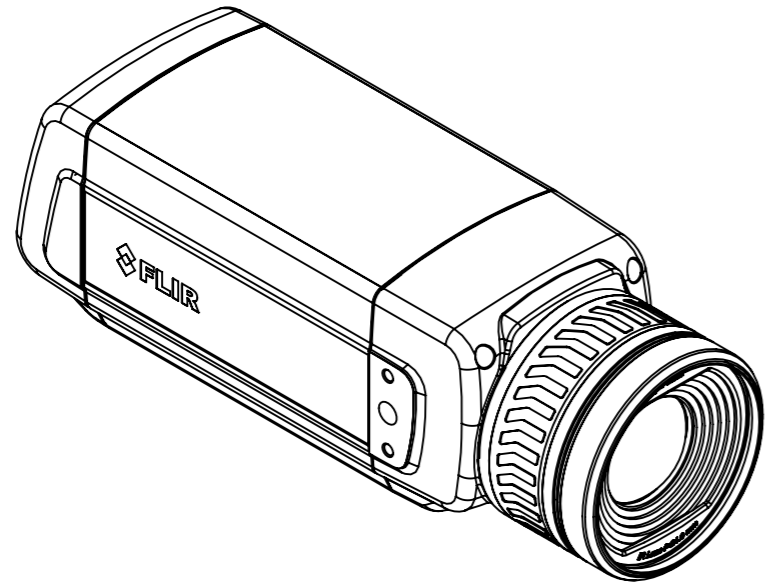


For additional dimensions see page 1

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			Sheet 3(9) Size A

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Camera with Lens IR f=24,6 mm (25°)

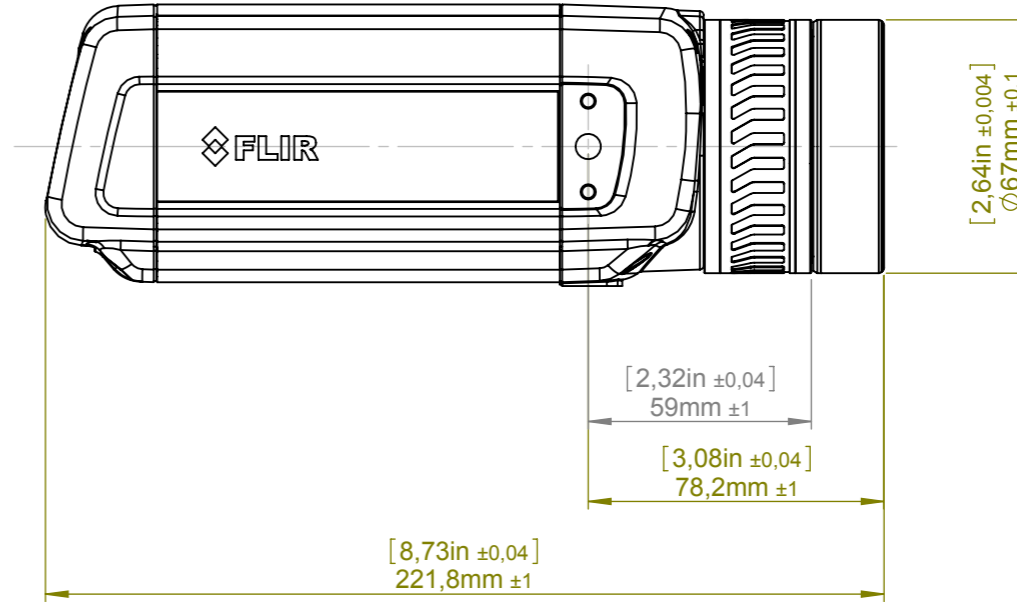
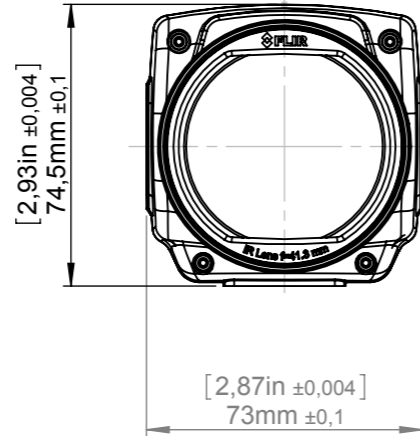
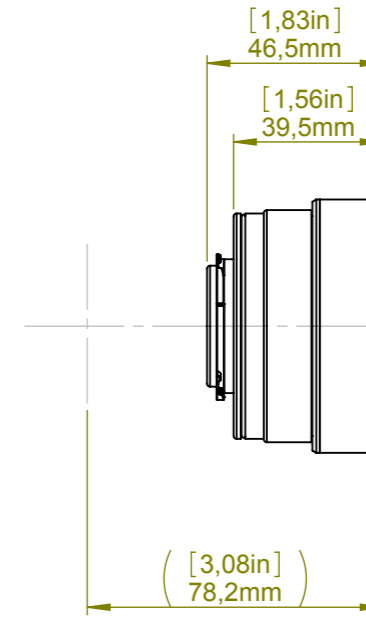
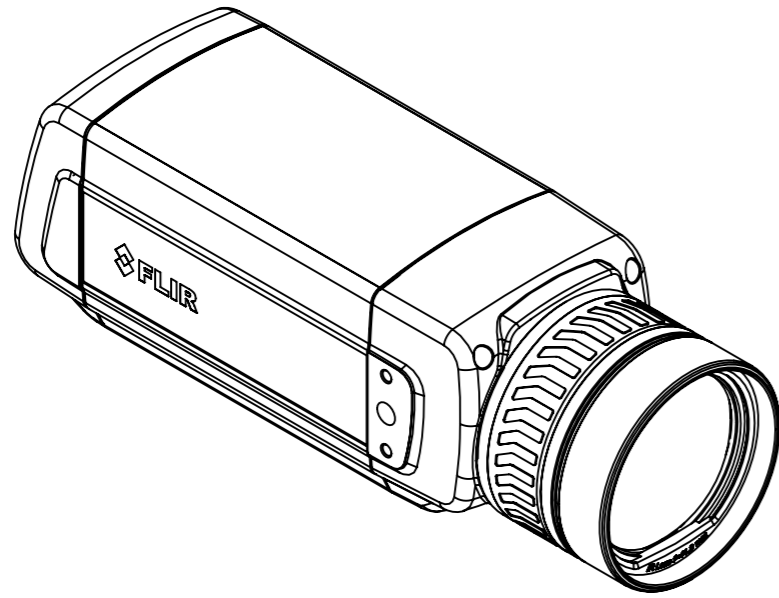


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Drawing No. T126925			Sheet 4(9)
			Size A

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Camera with Lens IR f=41,3 mm (15°)

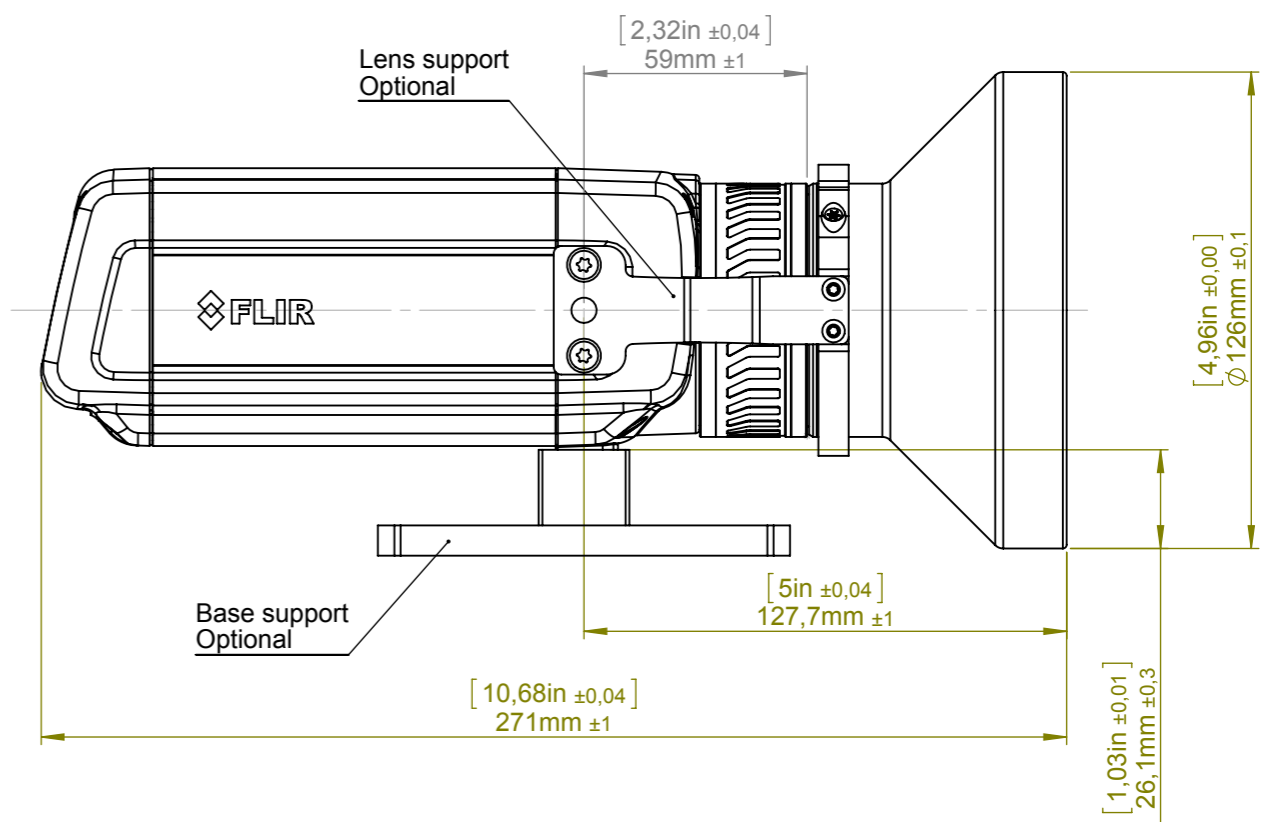
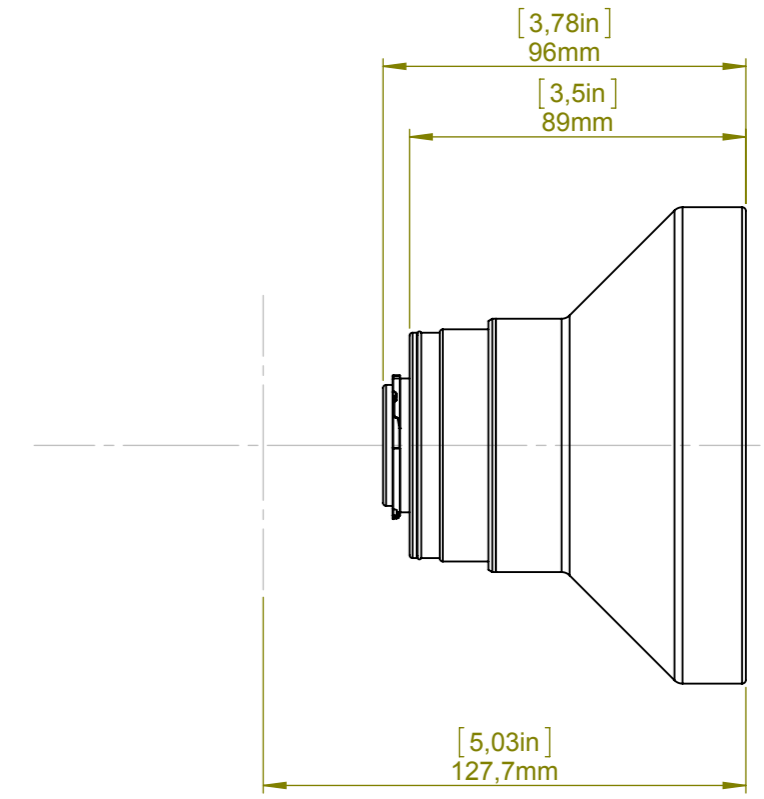
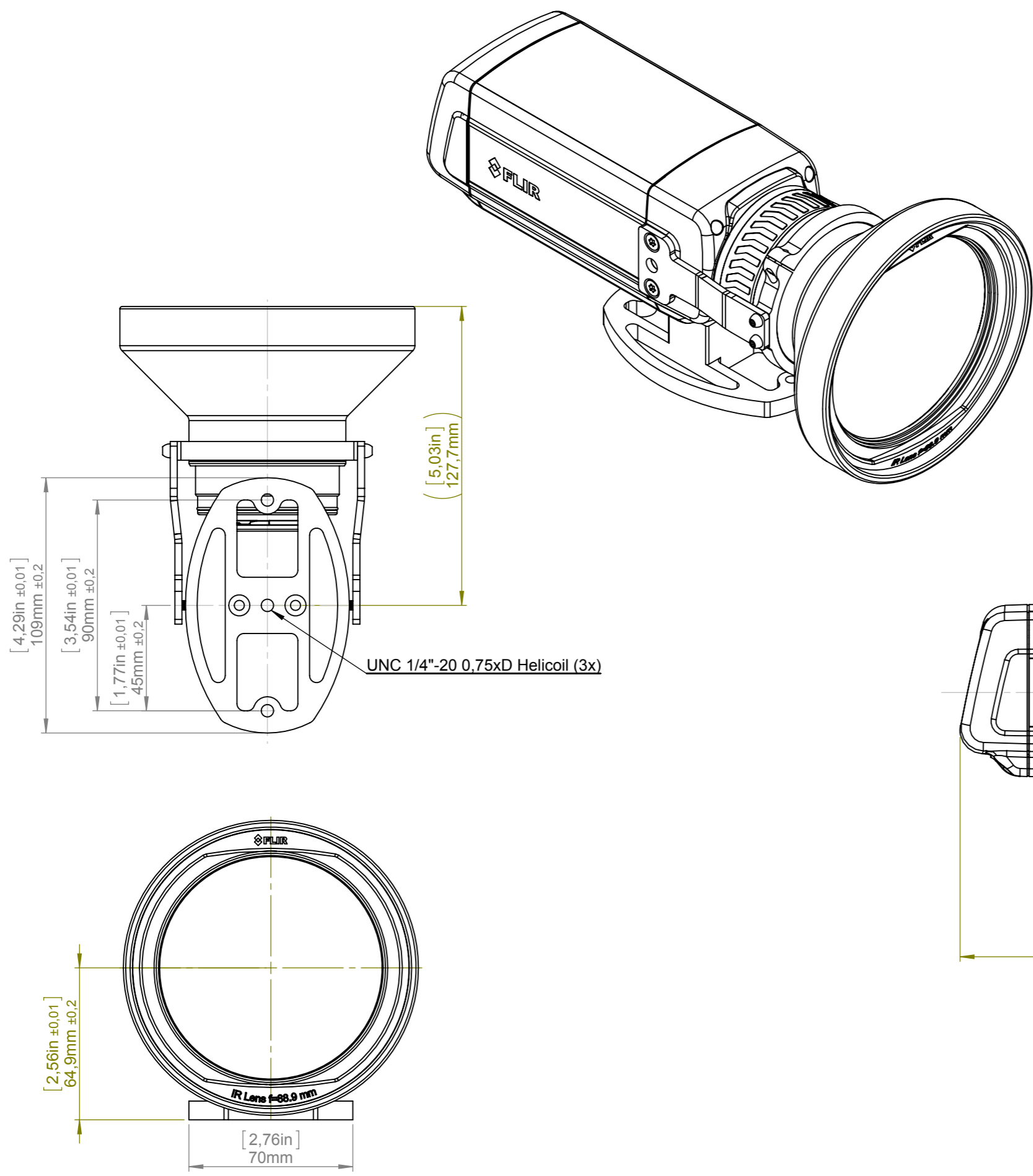


For additional dimensions see page 1

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Size A3	Scale 1:2	Sheet 5(9)	
Drawing No. T126925	Size A		

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Camera with Lens IR f=88,9 mm (7°) incl support



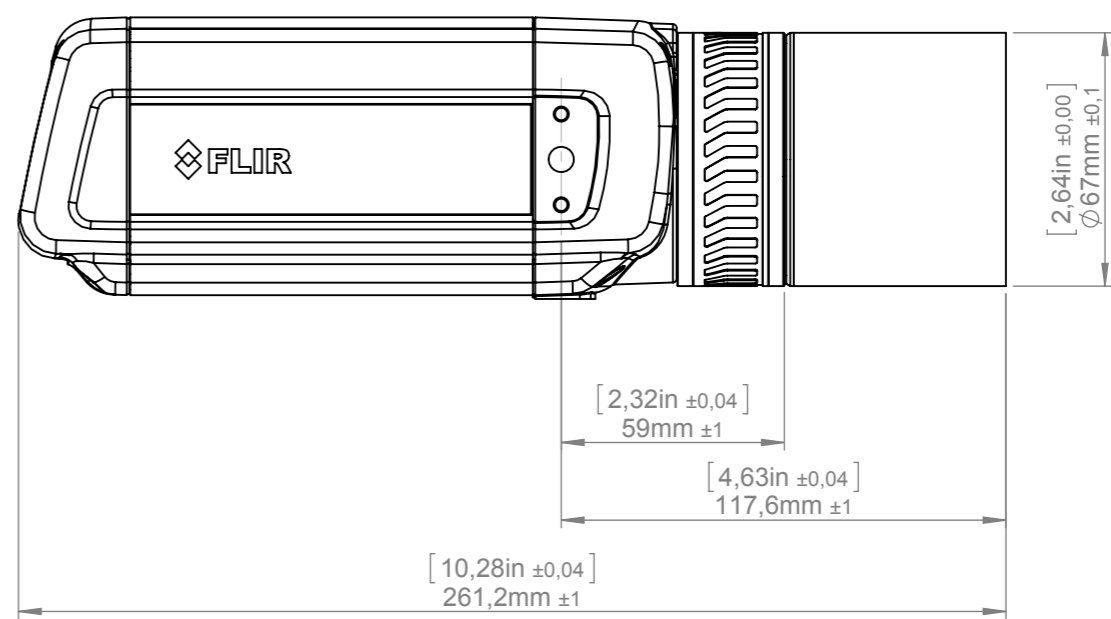
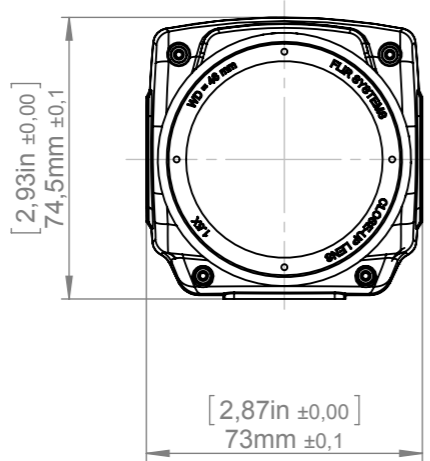
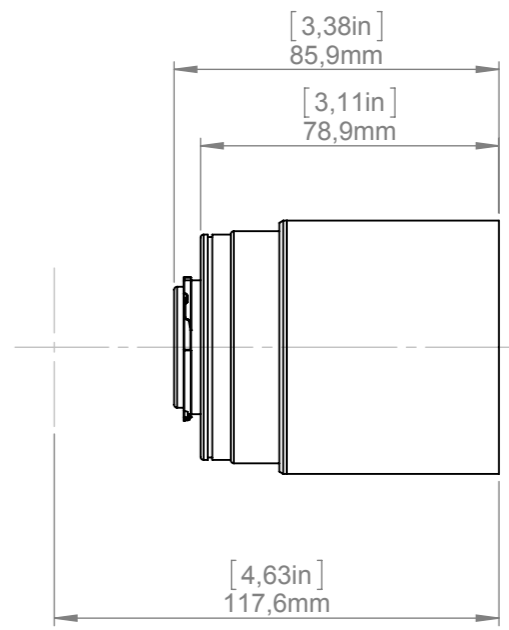
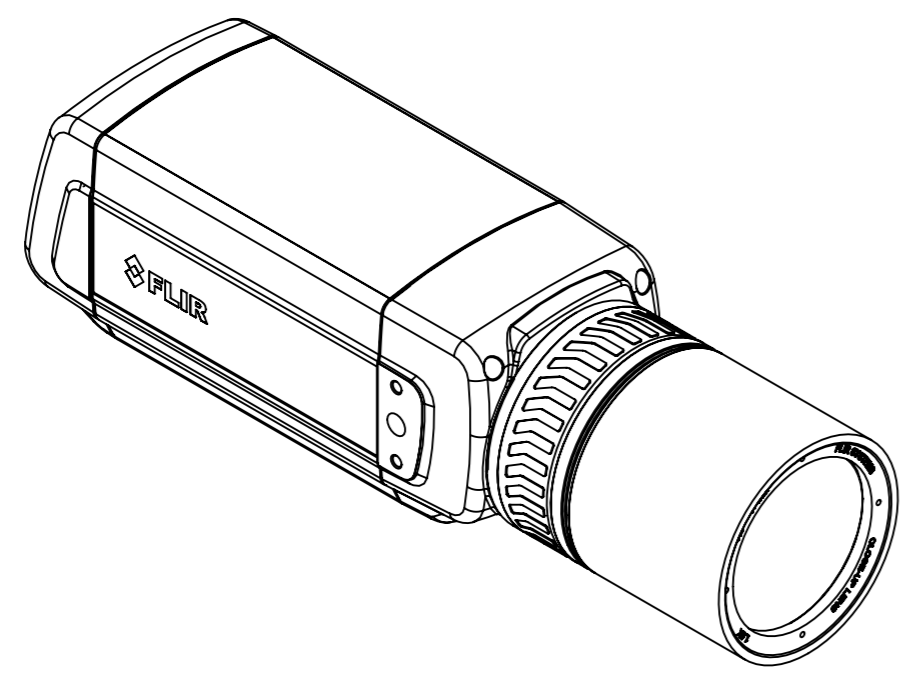
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Drawing No. T126925			Size A

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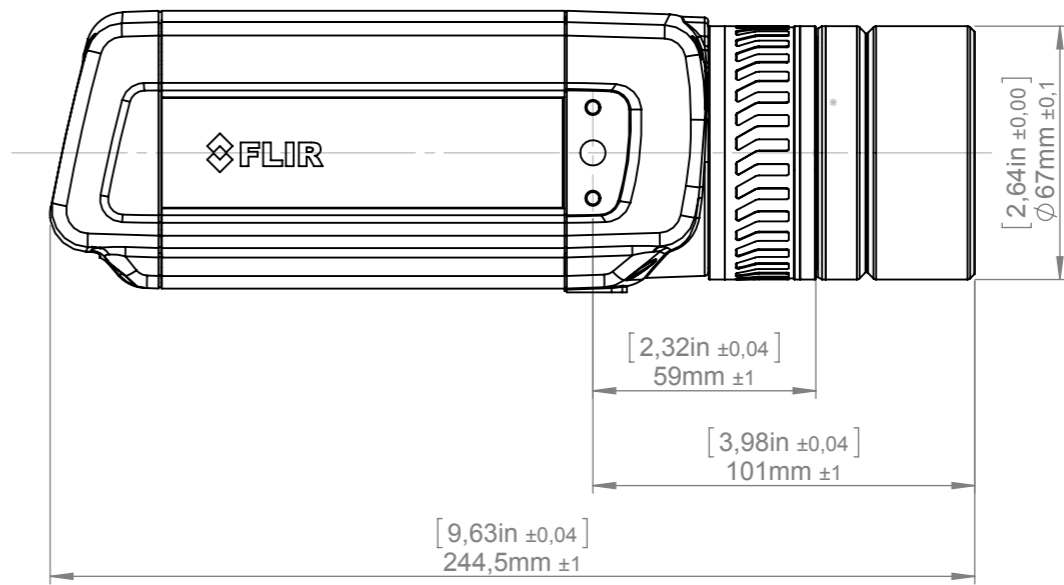
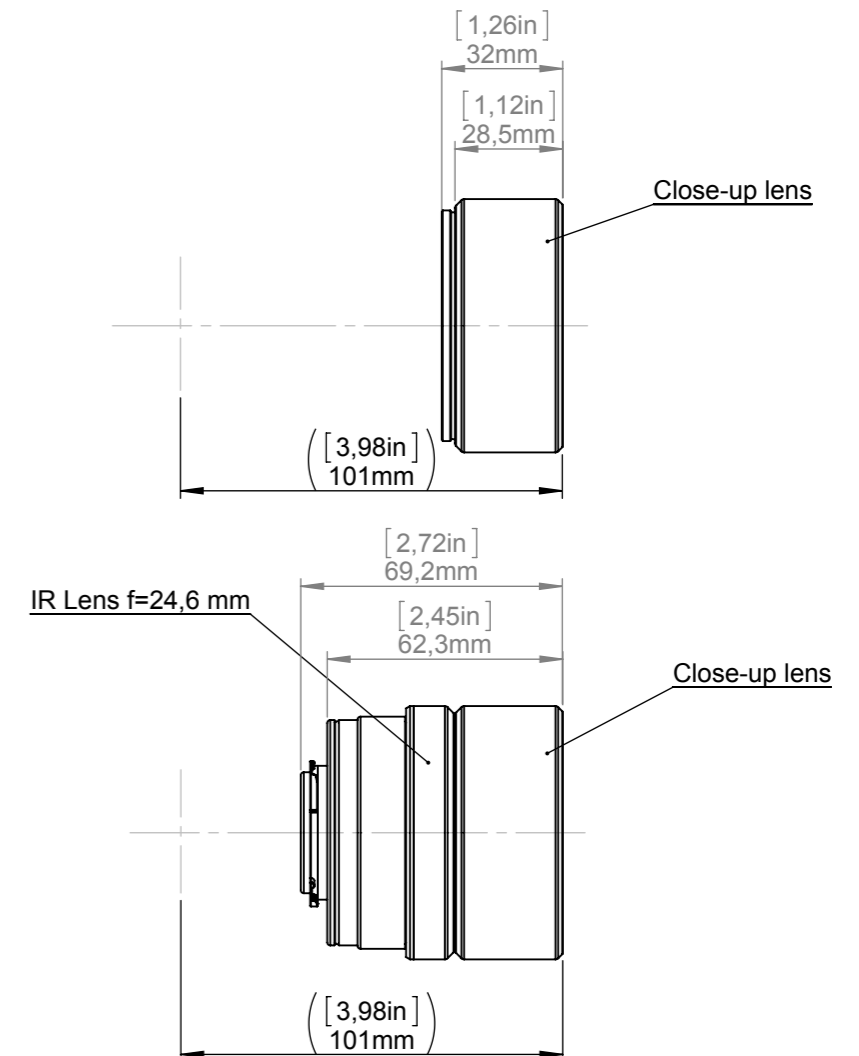
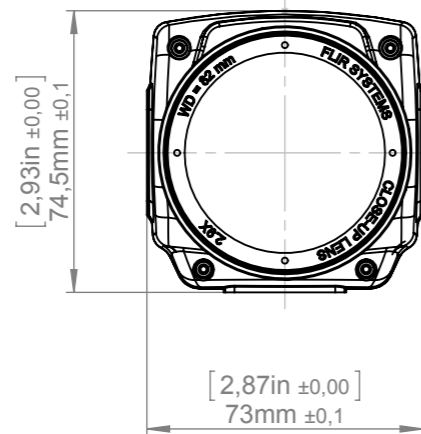
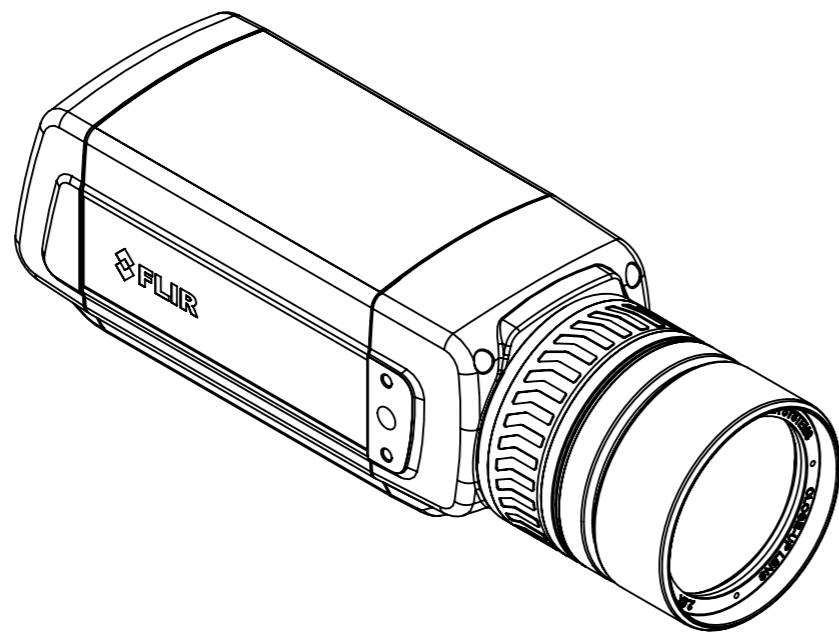
Camera with Close-up lens 1,5X (25 µm)



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Camera with Close-up lens 2,9X (50 μm)

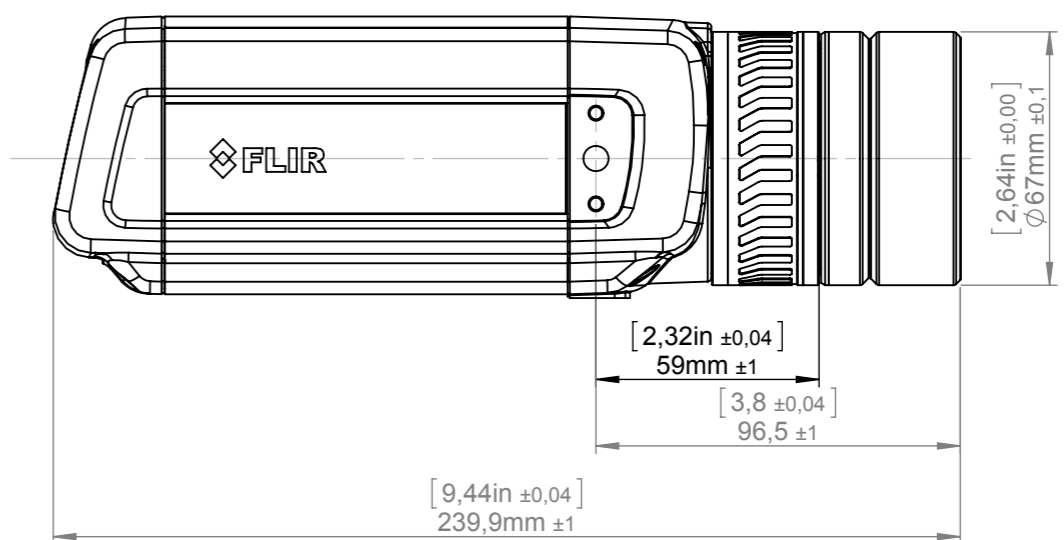
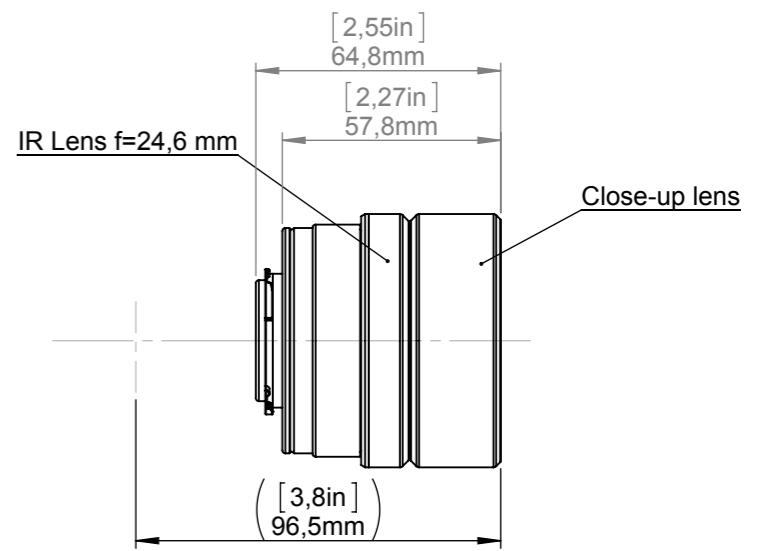
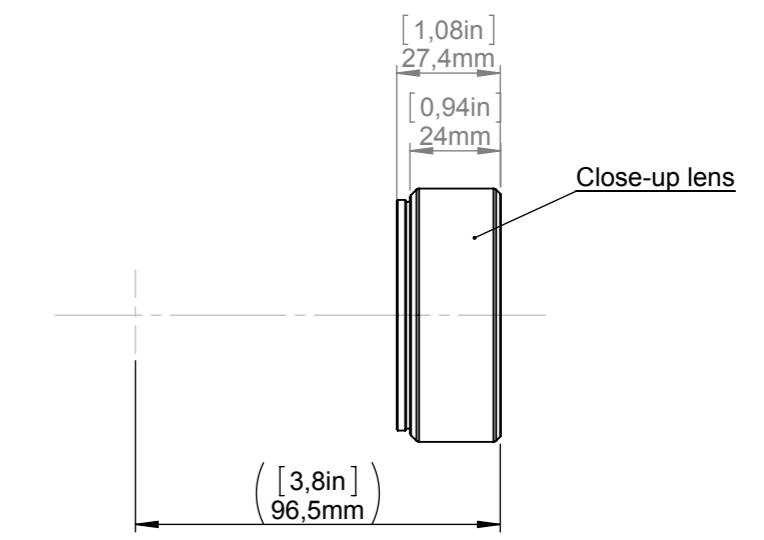
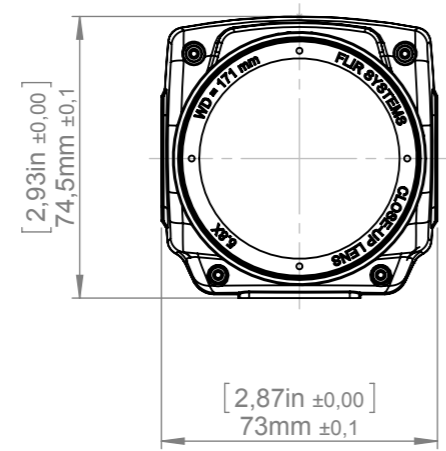
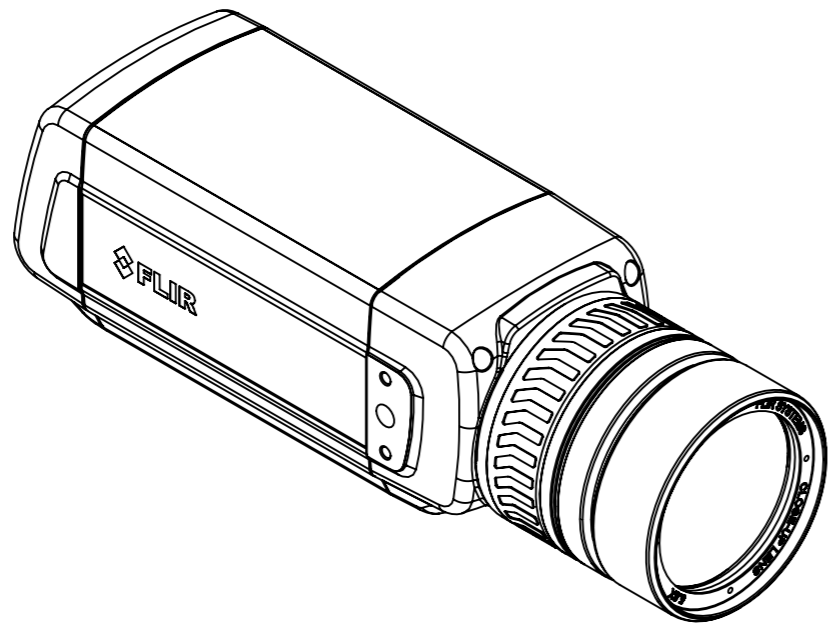


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Camera with Close-up lens 5,8X (100 μm)



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