

**Part number:**

**48001-1101**

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February 19, 2013, 01:58 AM

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**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	320 × 240 pixels
Thermal sensitivity/NETD	< 0.05°C @ +30°C (+86°F) / 50 mK
Field of view (FOV) / Minimum focus distance	25° × 18.8° / 0.4 m (1.31 ft.)
Focal length	18 mm (0.7 in.)
Spatial resolution (IFOV)	1.36 mrad
Lens identification	Automatic
F-number	1.3
Image frequency	60 Hz
Focus	Automatic or manual (built in motor)

**Detector data**

Focal Plane Array (FPA) / Spectral range	Uncooled microbolometer / 7.5–13 μm
Detector pitch	25 μm
Detector time constant	Typical 12 ms

**Measurement**

Object temperature range	-20 to +120°C (-4 to +248°F) 0 to +350°C (+32 to +662°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

**Ethernet**

Ethernet	Control and image
Ethernet, type	Gigabit Ethernet
Ethernet, standard	IEEE 802.3
Ethernet, connector type	RJ-45
Ethernet, communication	TCP/IP socket-based FLIR proprietary and GenICam protocol

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## Ethernet

Ethernet, image streaming	16-bit 320 × 240 pixels @ 60 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"> <li>EN 61000-6-2:2001 (Immunity)</li> <li>EN 61000-6-3:2001 (Emission)</li> <li>FCC 47 CFR Part 15 Class B (Emission)</li> </ul>
Encapsulation	IP 40 (IEC 60529)
Bump	25 g (IEC 60068-2-29)
Vibration	2 g (IEC 60068-2-6)

## Physical data

Weight	0.7 kg (1.54 lb.)
Camera size (L × W × H)	170 × 70 × 70 mm (6.7 × 2.8 × 2.8 in.)
Tripod mounting	UNC ¼"-20 (on three sides)
Base mounting	2 × M4 thread mounting holes (on three sides)
Housing material	Aluminum



## FLIR A315

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**P/N: 48001-1101**

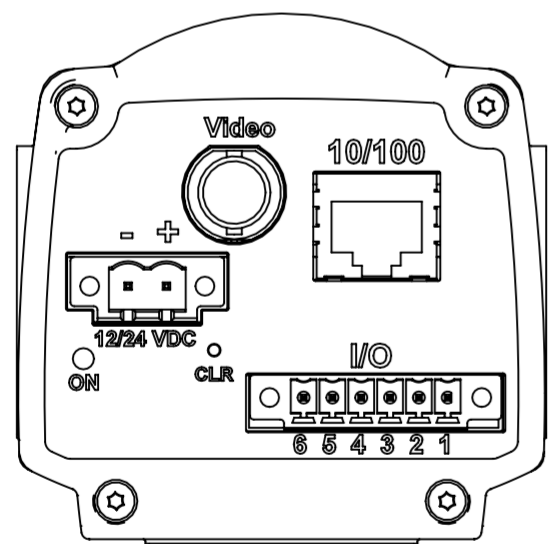
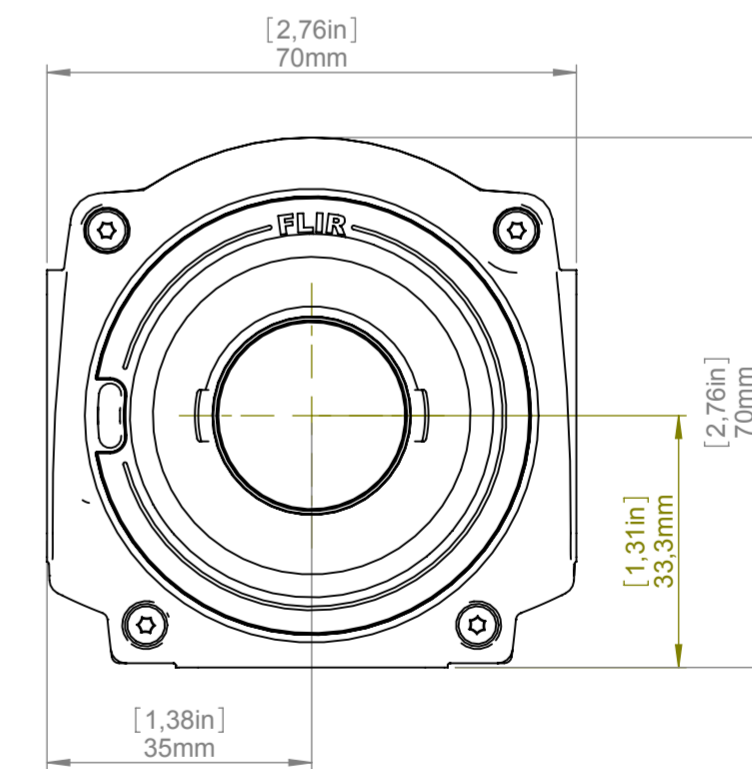
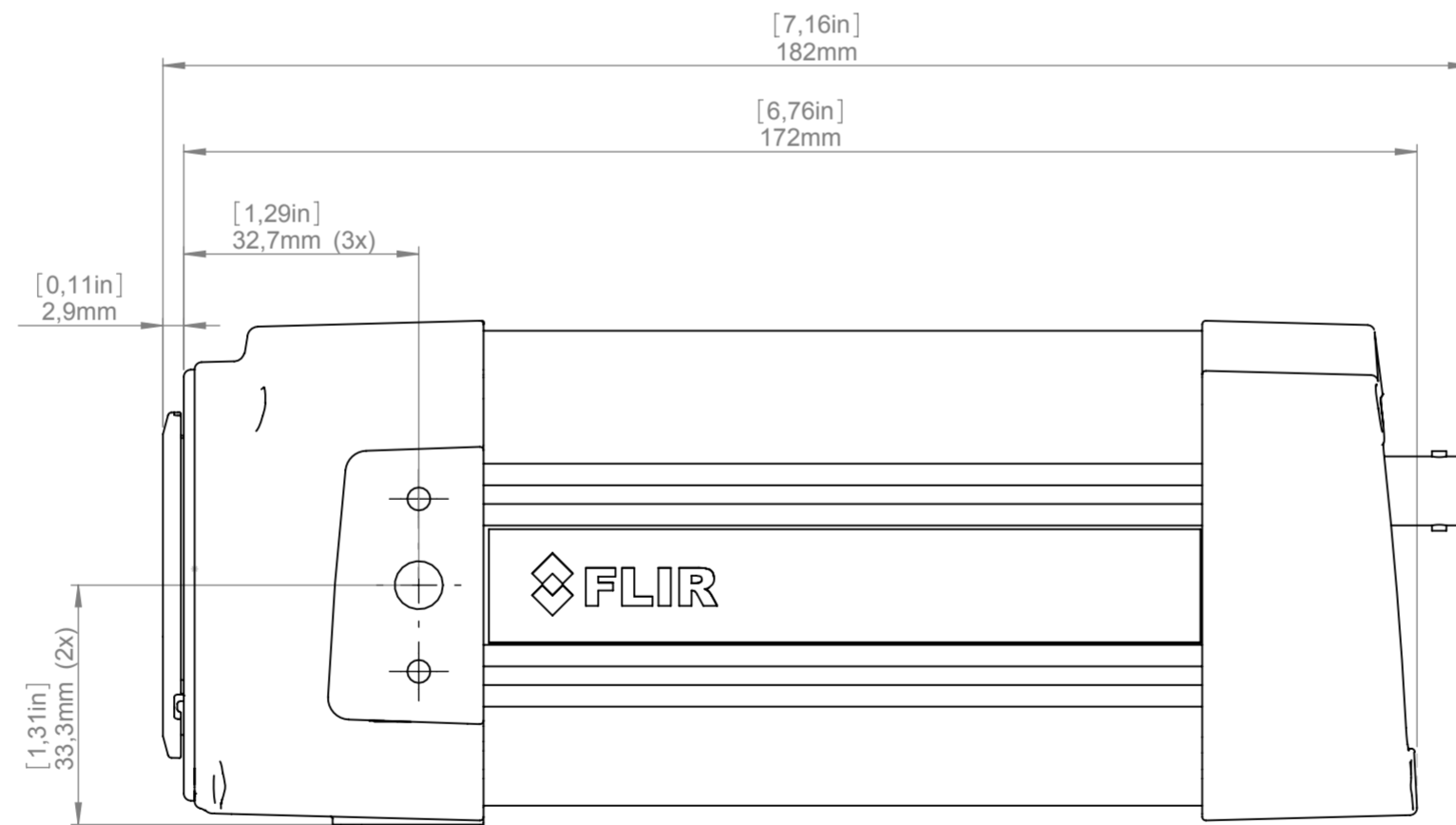
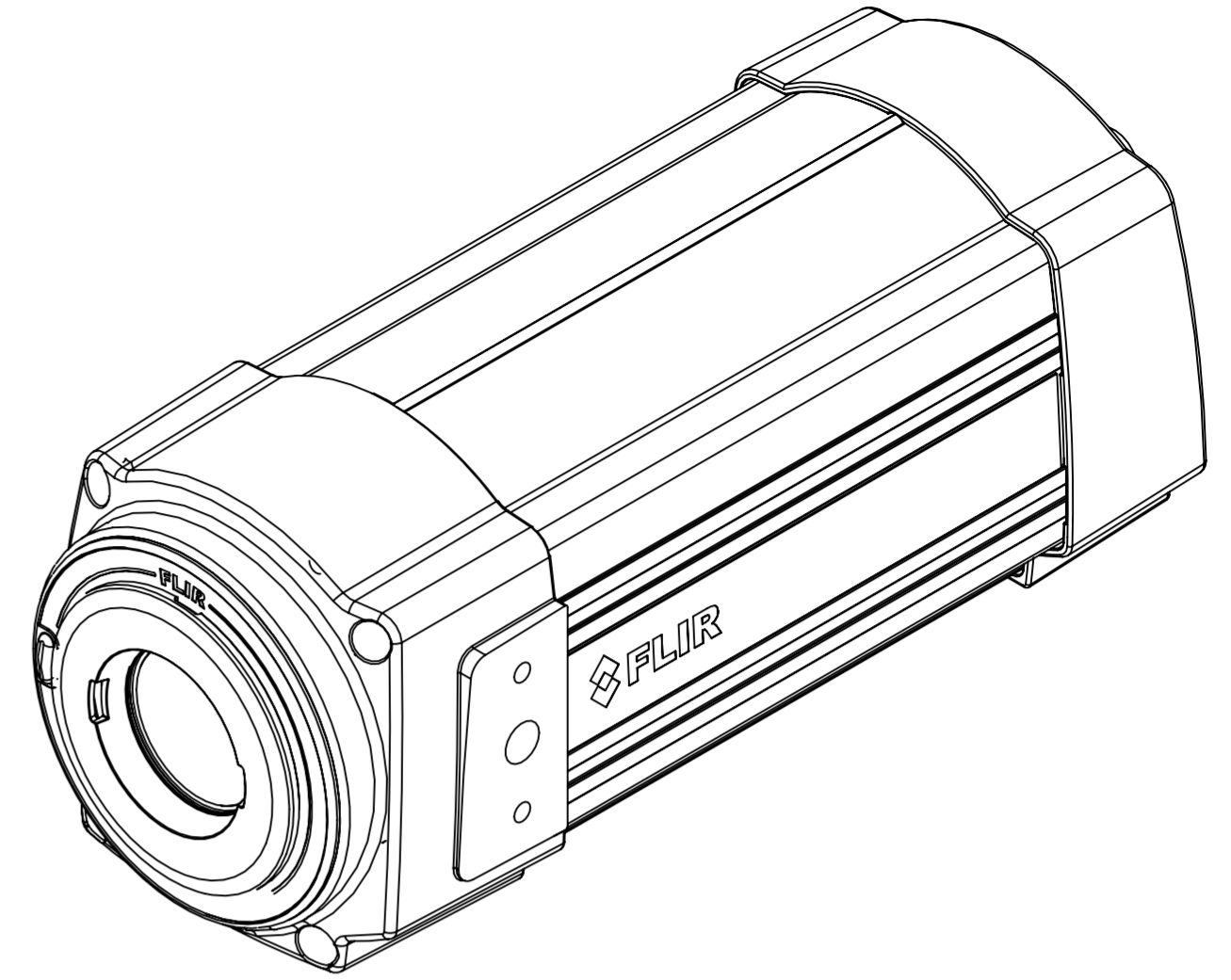
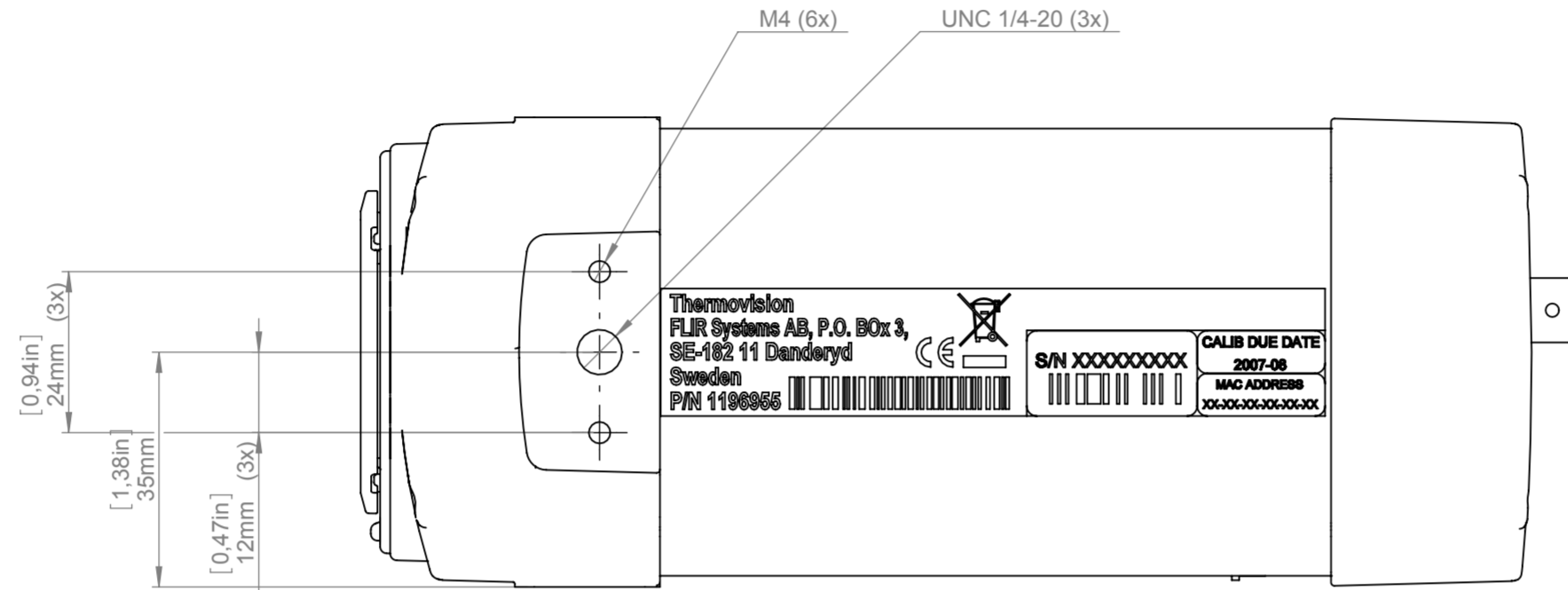
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### Shipping information

- Infrared camera with lens
  - Calibration certificate
  - Cardboard box
  - Downloads brochure
  - Ethernet™ cable
  - FLIR apps card
  - FLIR Tools download card
  - Getting Started Guide
  - Important Information Guide
  - Mains cable
  - Optics brochure
  - Power cable, pig-tailed
  - Power supply
  - Service & training brochure
  - Thank you card
  - User documentation CD-ROM
  - Utility CD-ROM
  - Registration card
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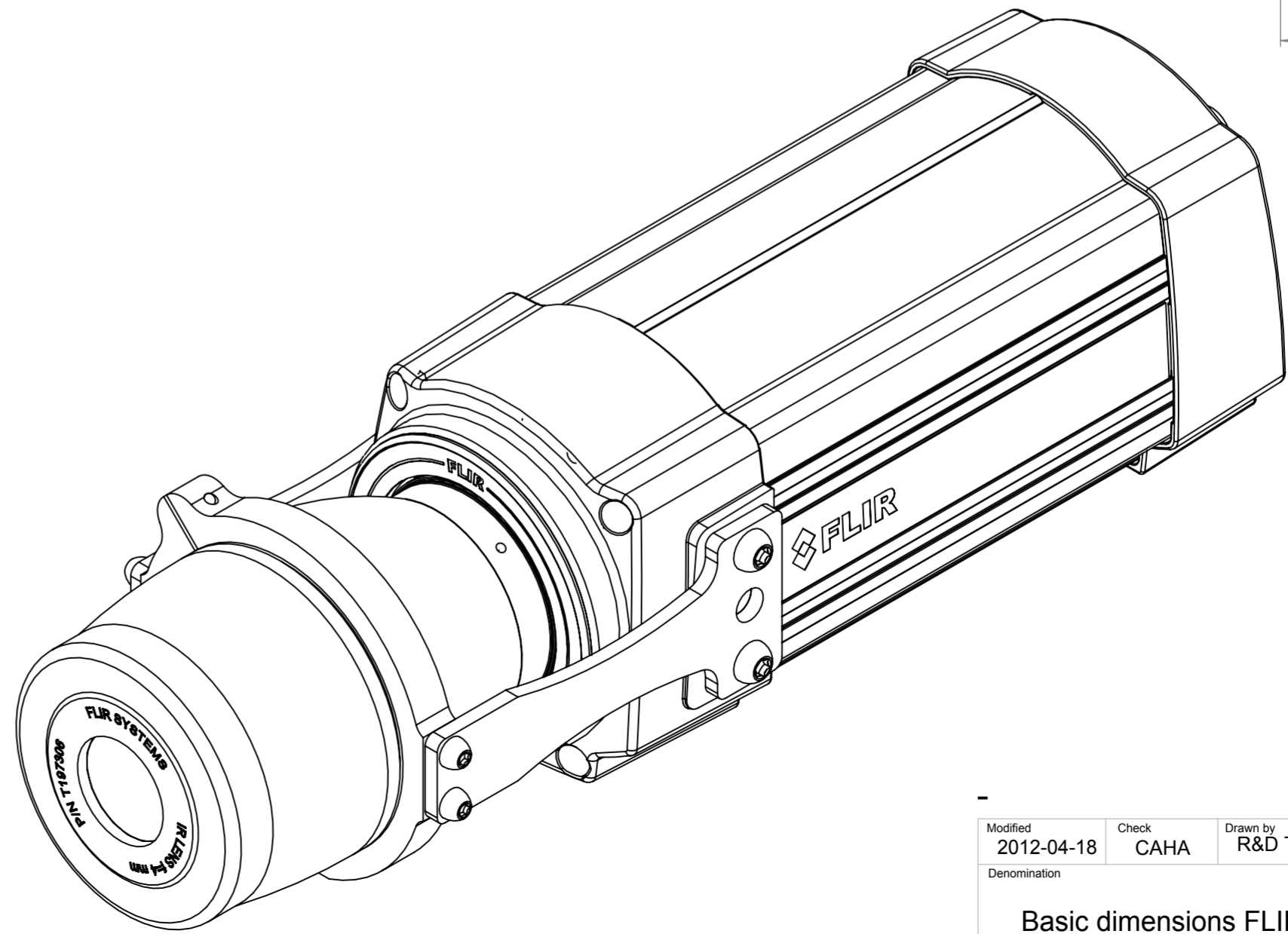
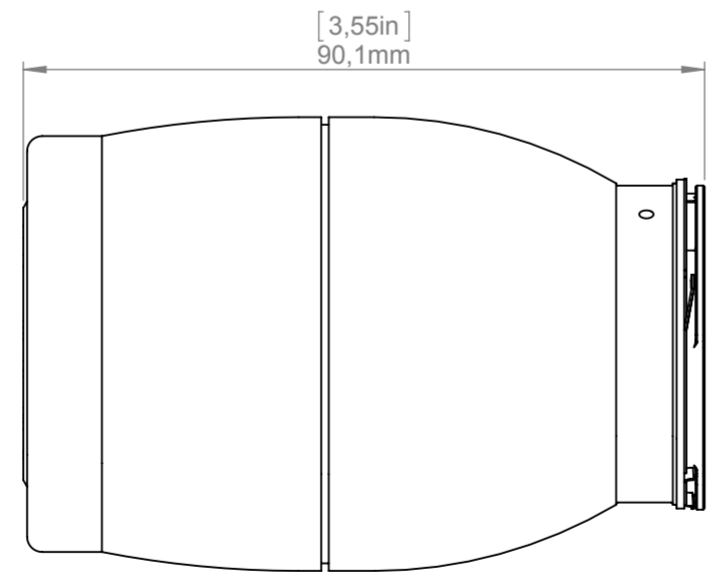
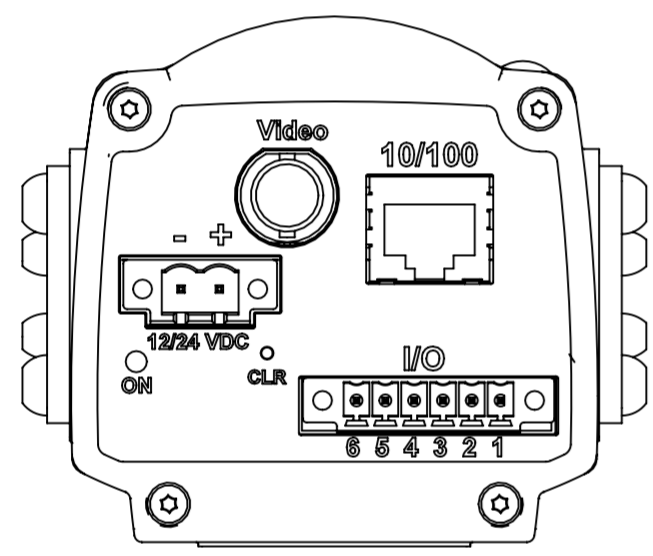
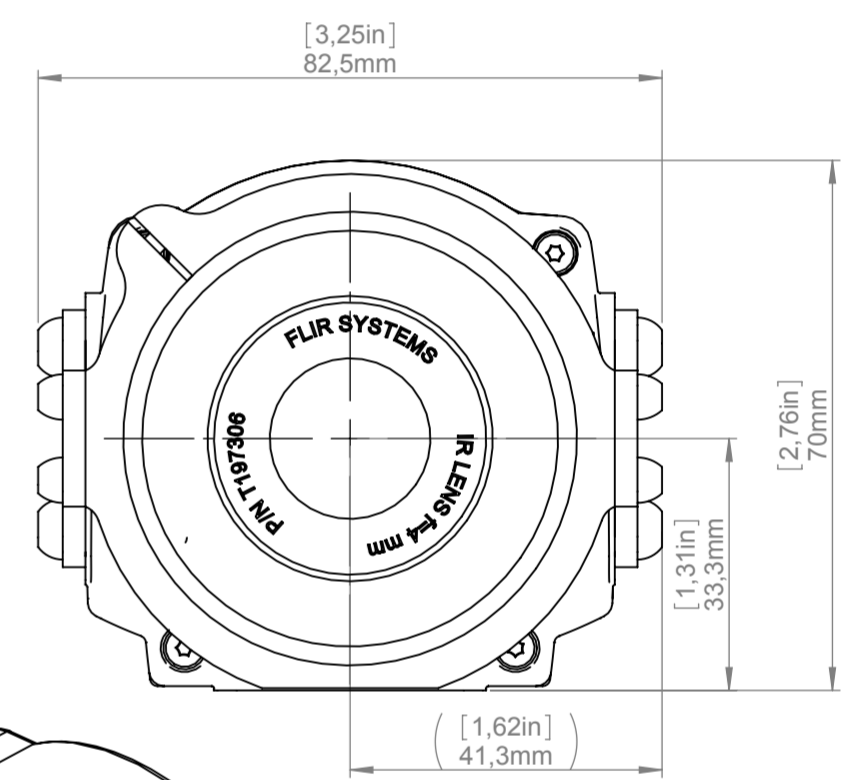
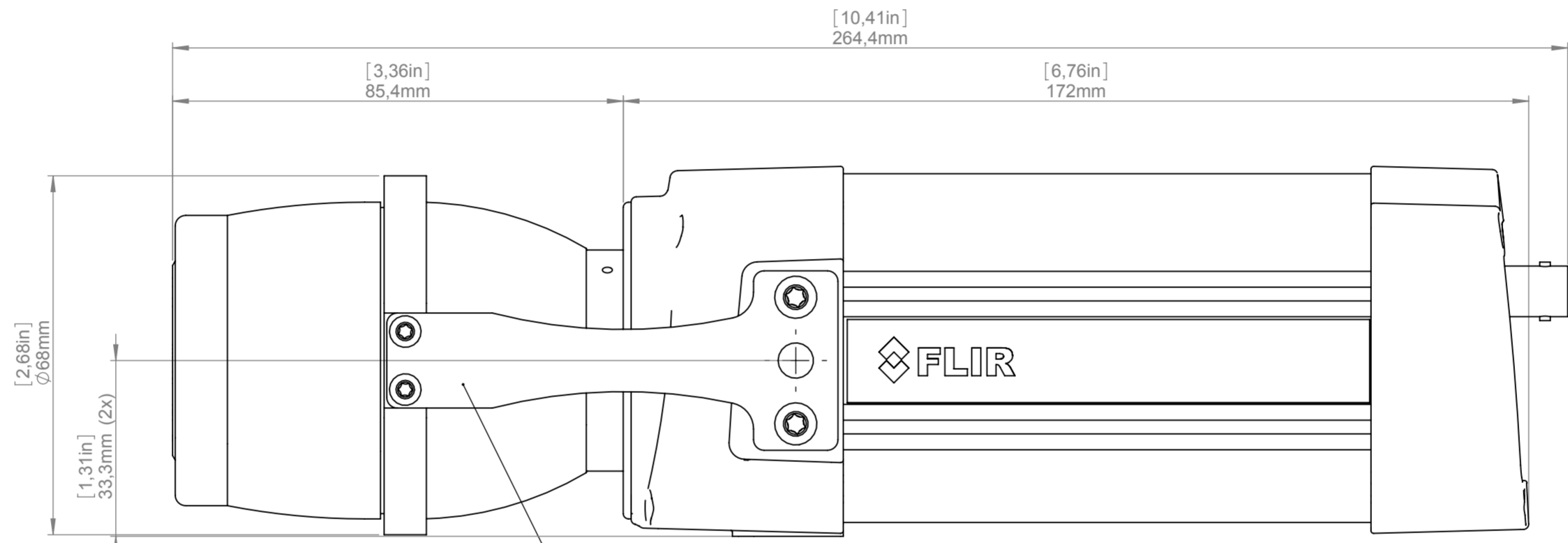
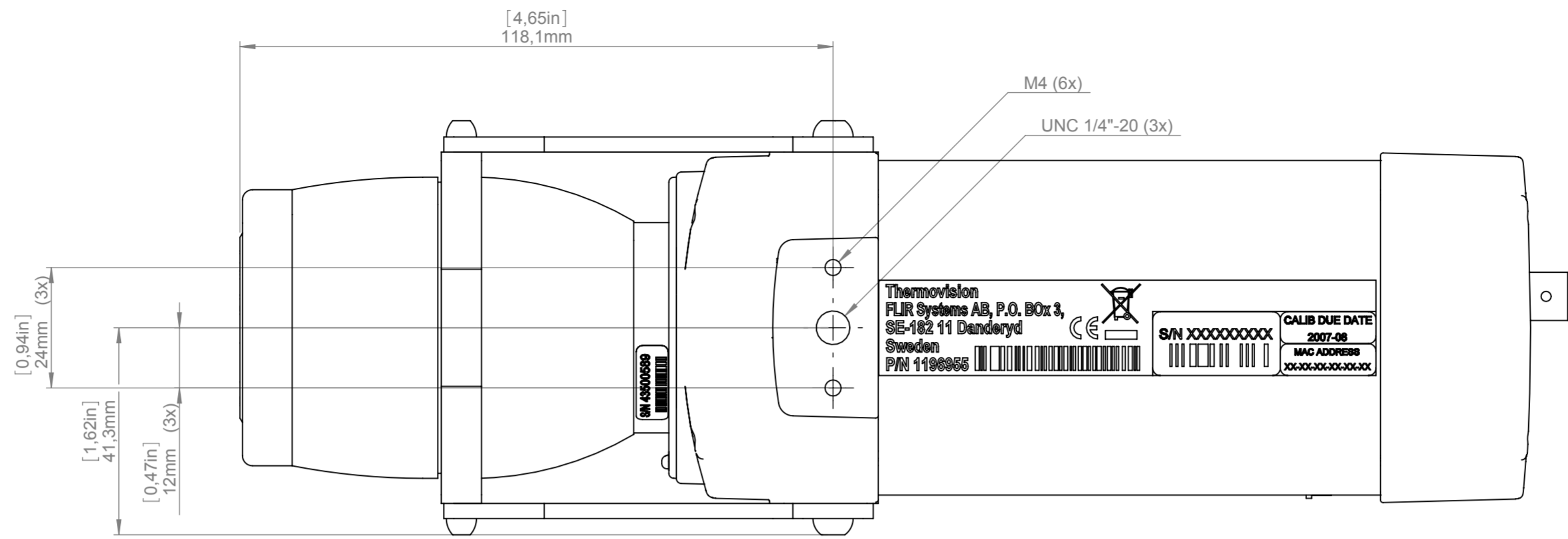
# Camera with built-in IR lens f=18 mm (25°)



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Modified 2012-04-18	Check CAHA	Drawn by R&D Thermography	Size A3		Sheet 1(8)
Denomination Basic dimensions FLIR A3xx/SC3xx			Scale 1:1		Size A
Drawing No. T125002					

# Camera with Lens IR f=4 mm (90°) incl support



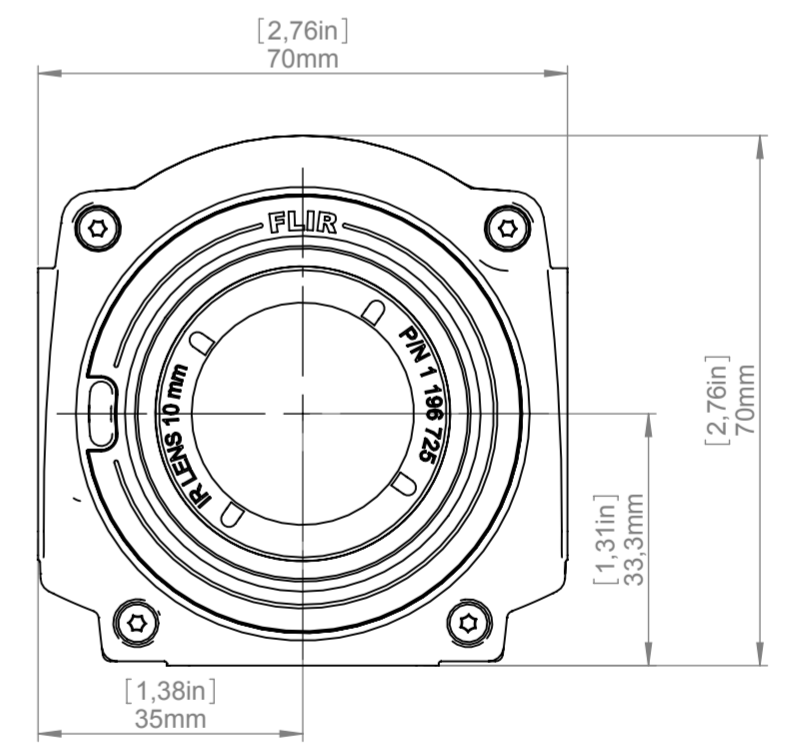
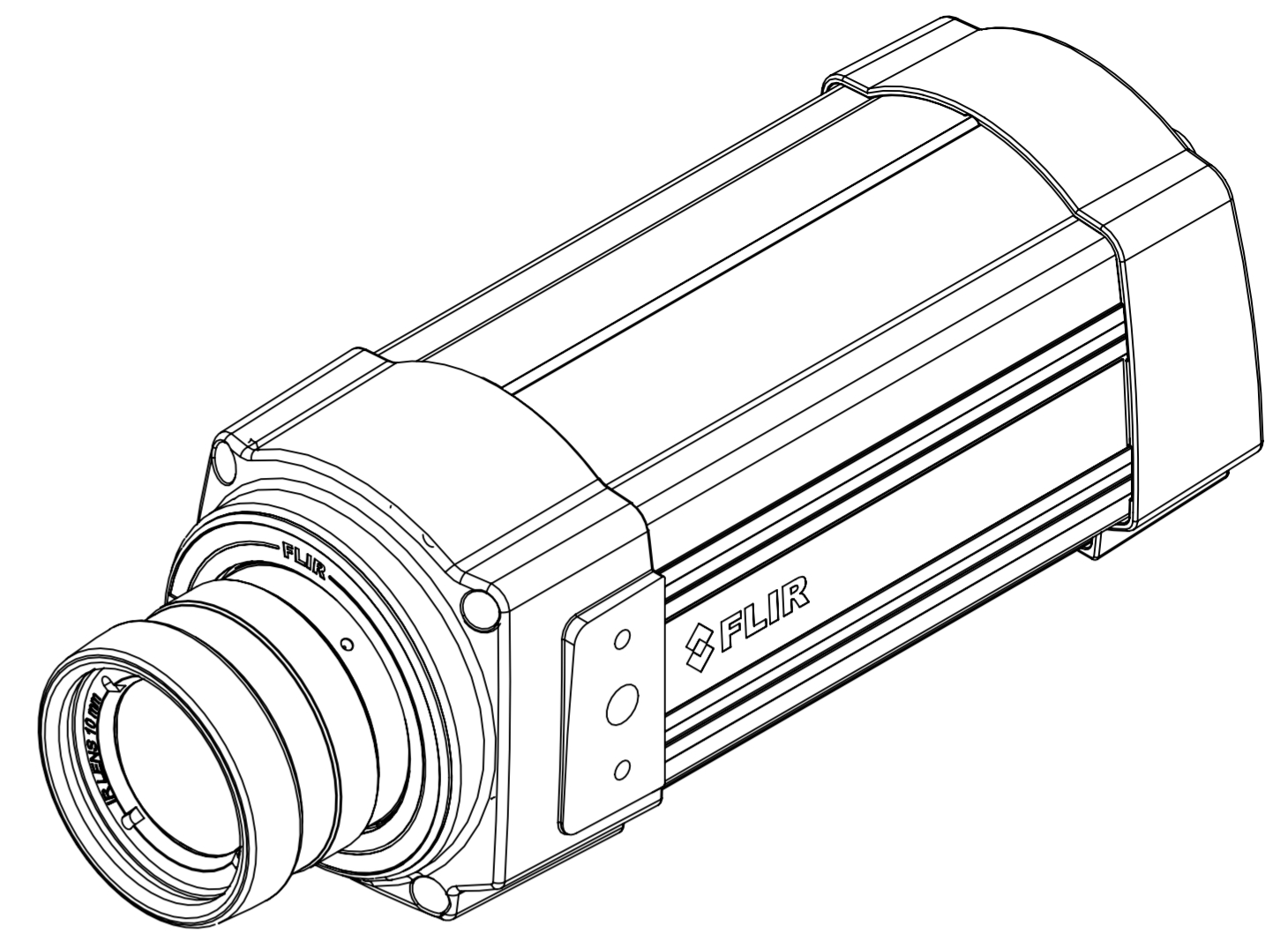
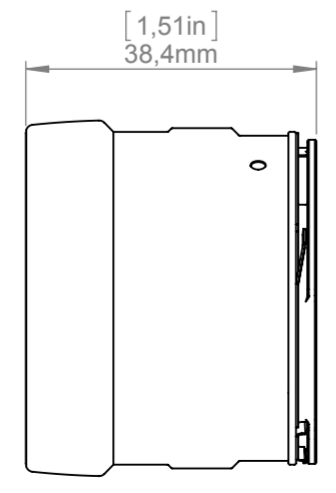
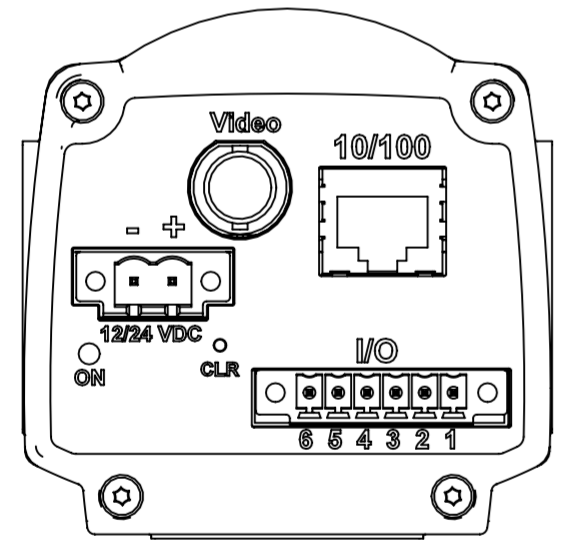
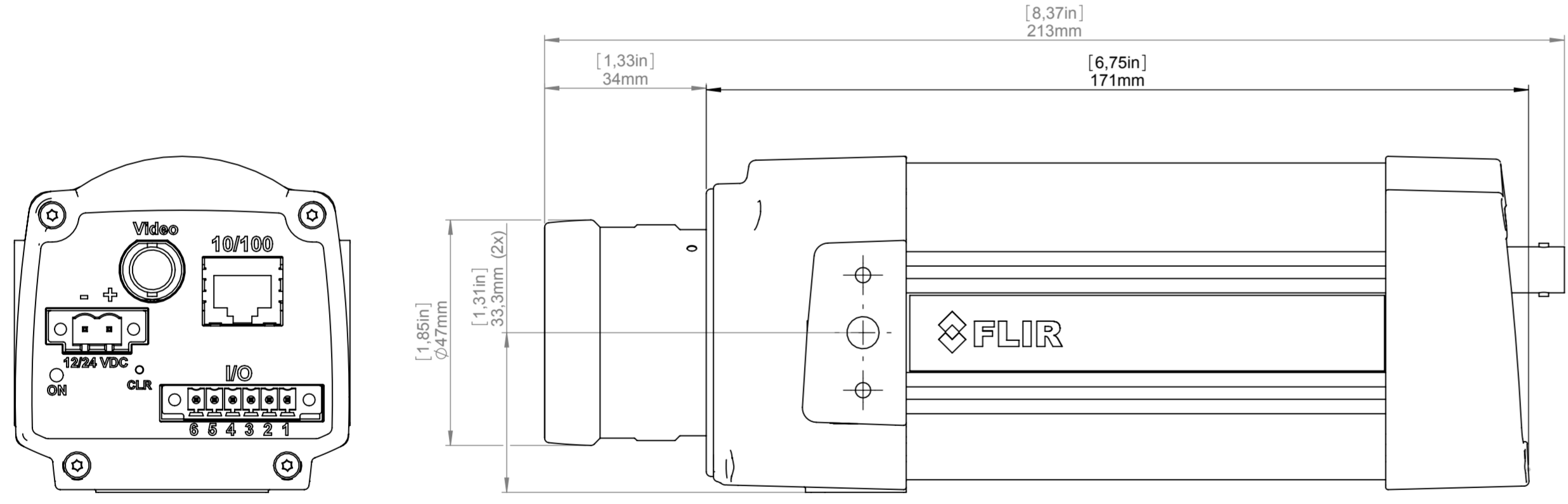
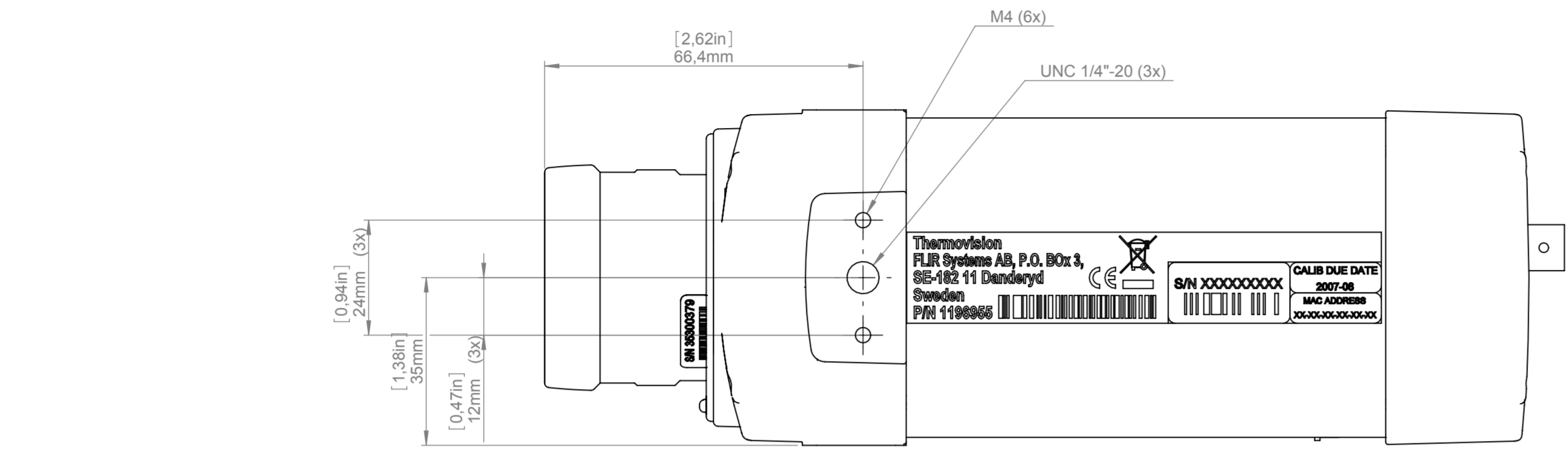
Lens support  
Optional

For additional dimensions see page 1

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Basic dimensions FLIR A3xx/SC3xx			Size A3 Scale 1:1 Sheet 2(8)
Drawing No. T125002			Size A

# Camera with Lens IR f=10 mm (45°)

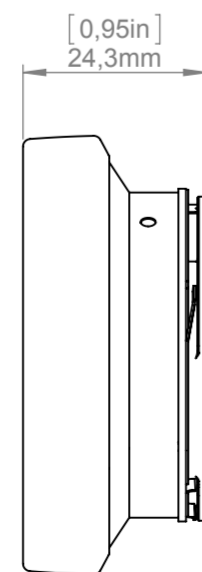
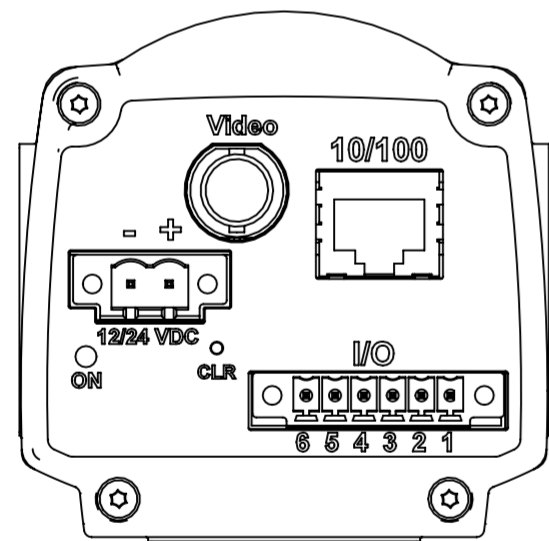
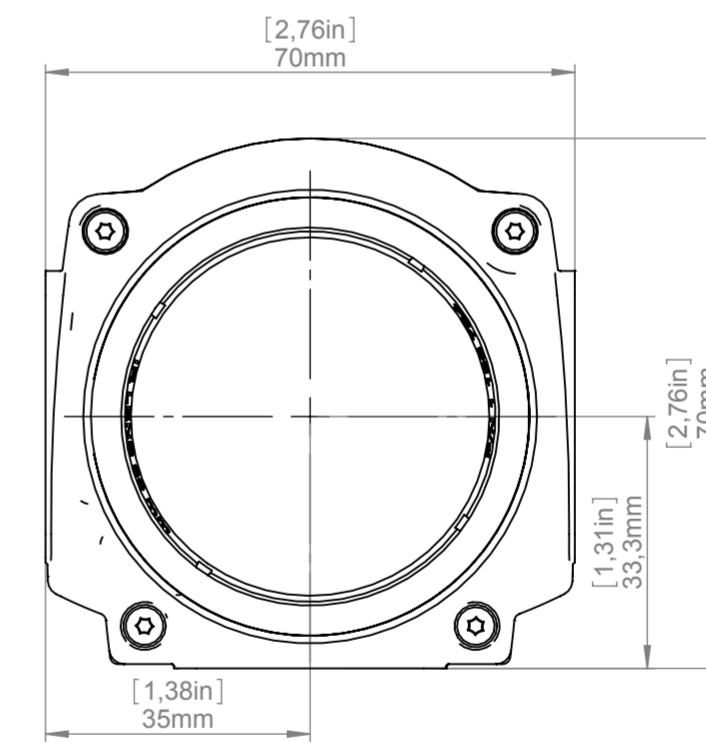
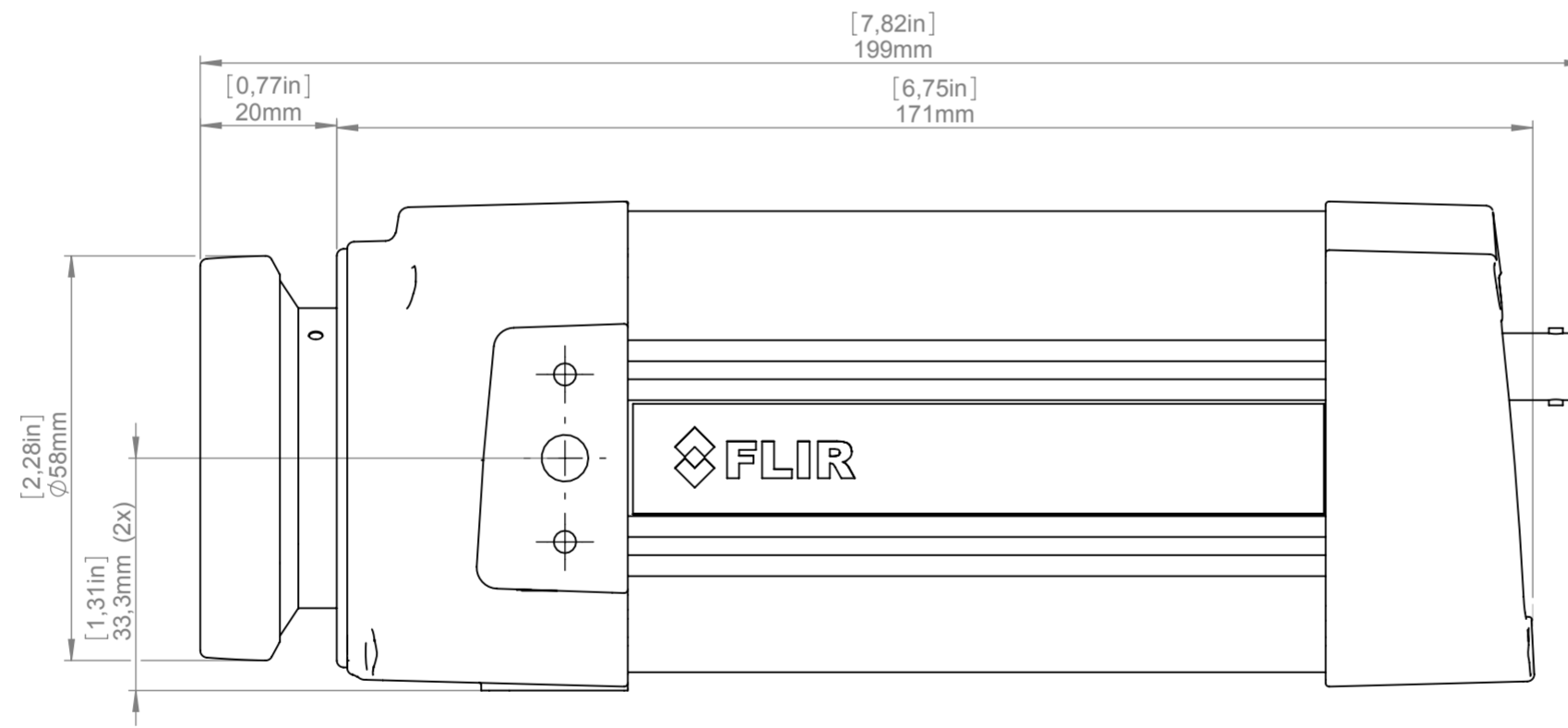
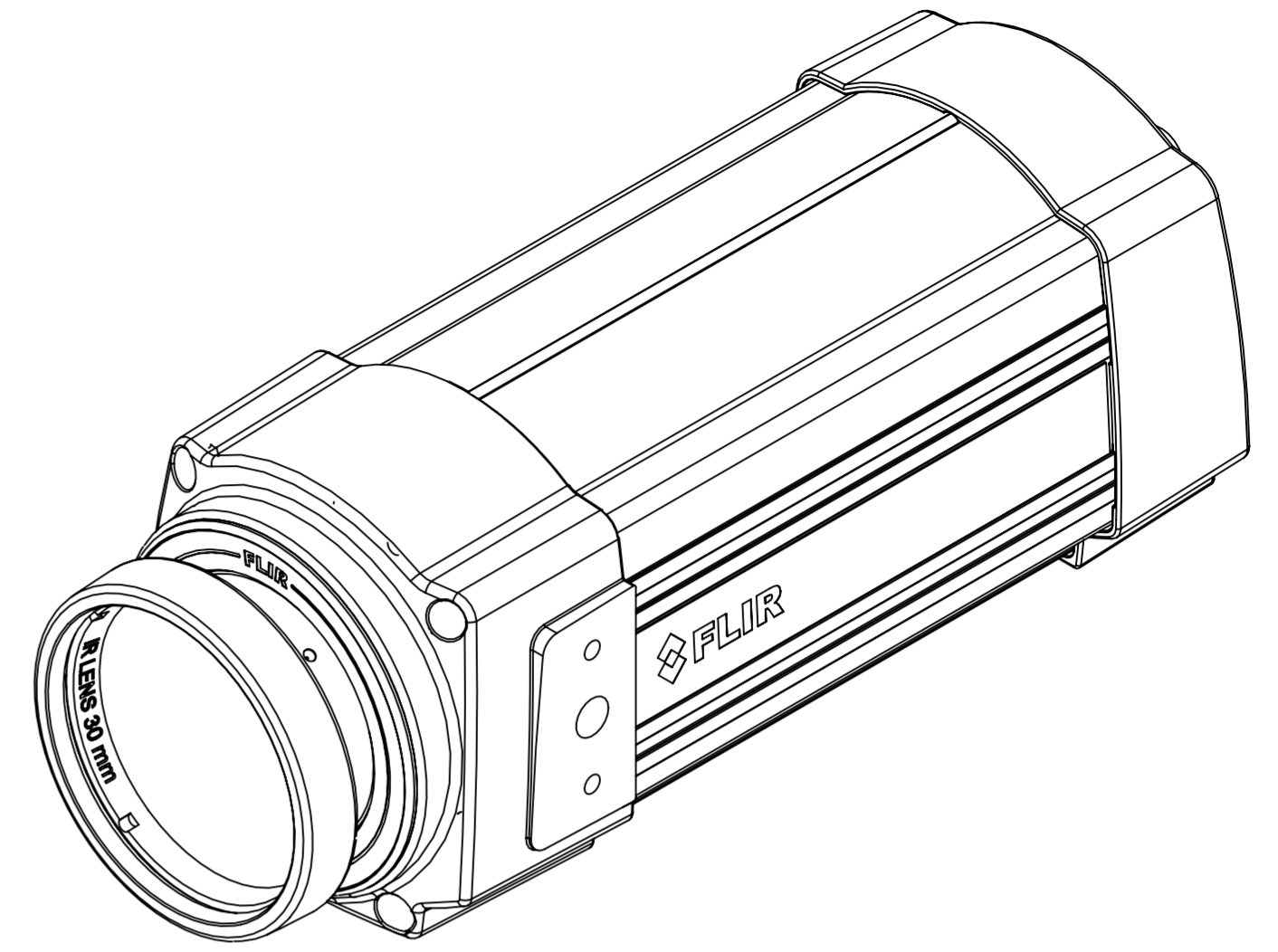
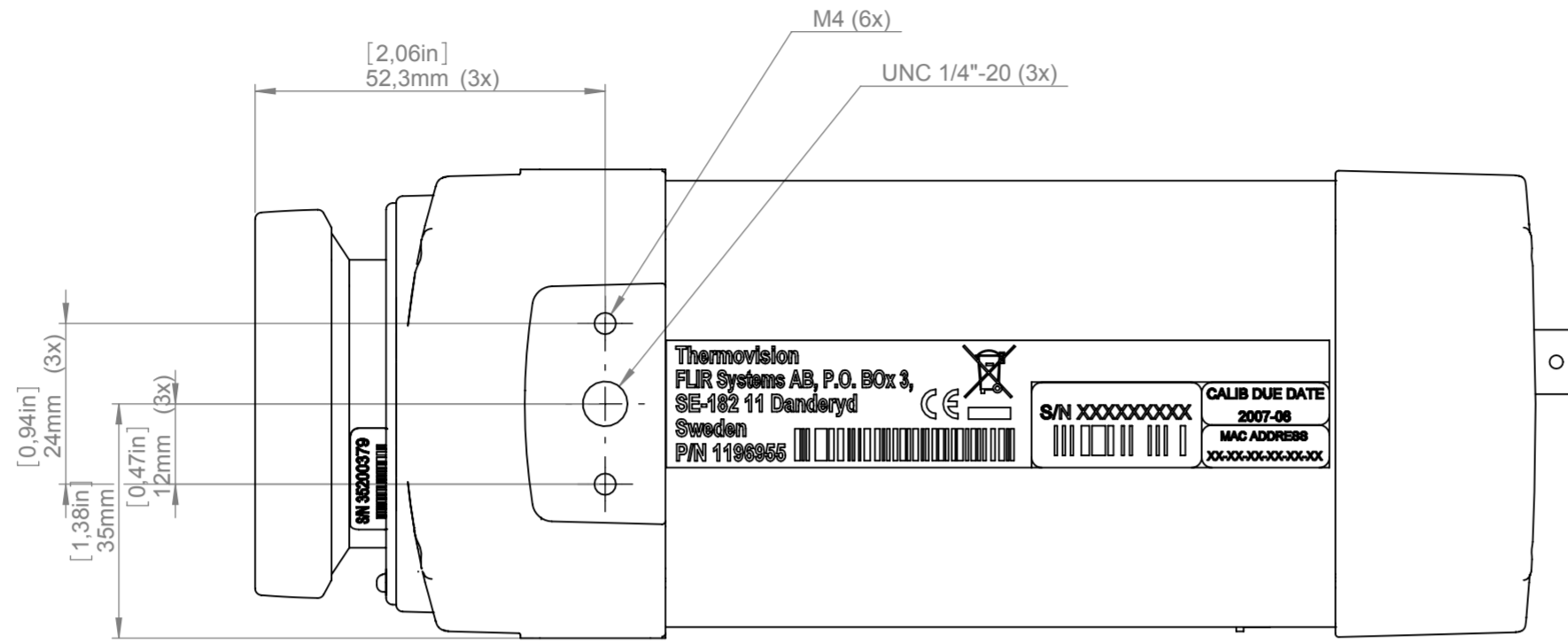


For additional dimensions see page 1

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Basic dimensions FLIR A3xx/SC3xx			Size A3 Scale 1:1 Sheet 3(8)
Drawing No. T125002			Size A

# Camera with Lens IR f=30 mm (15°)

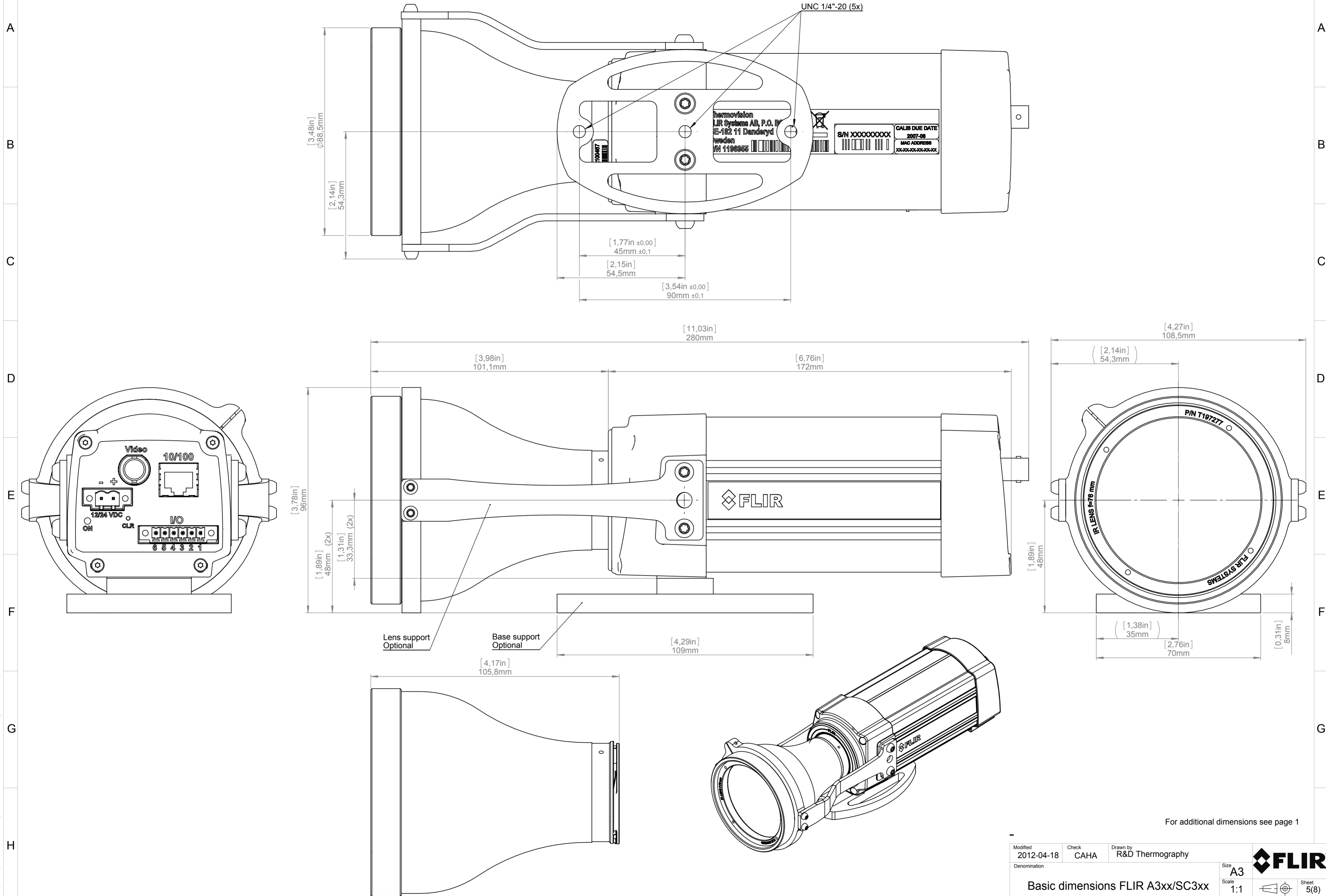


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Denomination Basic dimensions FLIR A3xx/SC3xx			Scale 1:1		Size A
Drawing No. T125002					

# Camera with Lens IR f=76 mm (6°) incl support



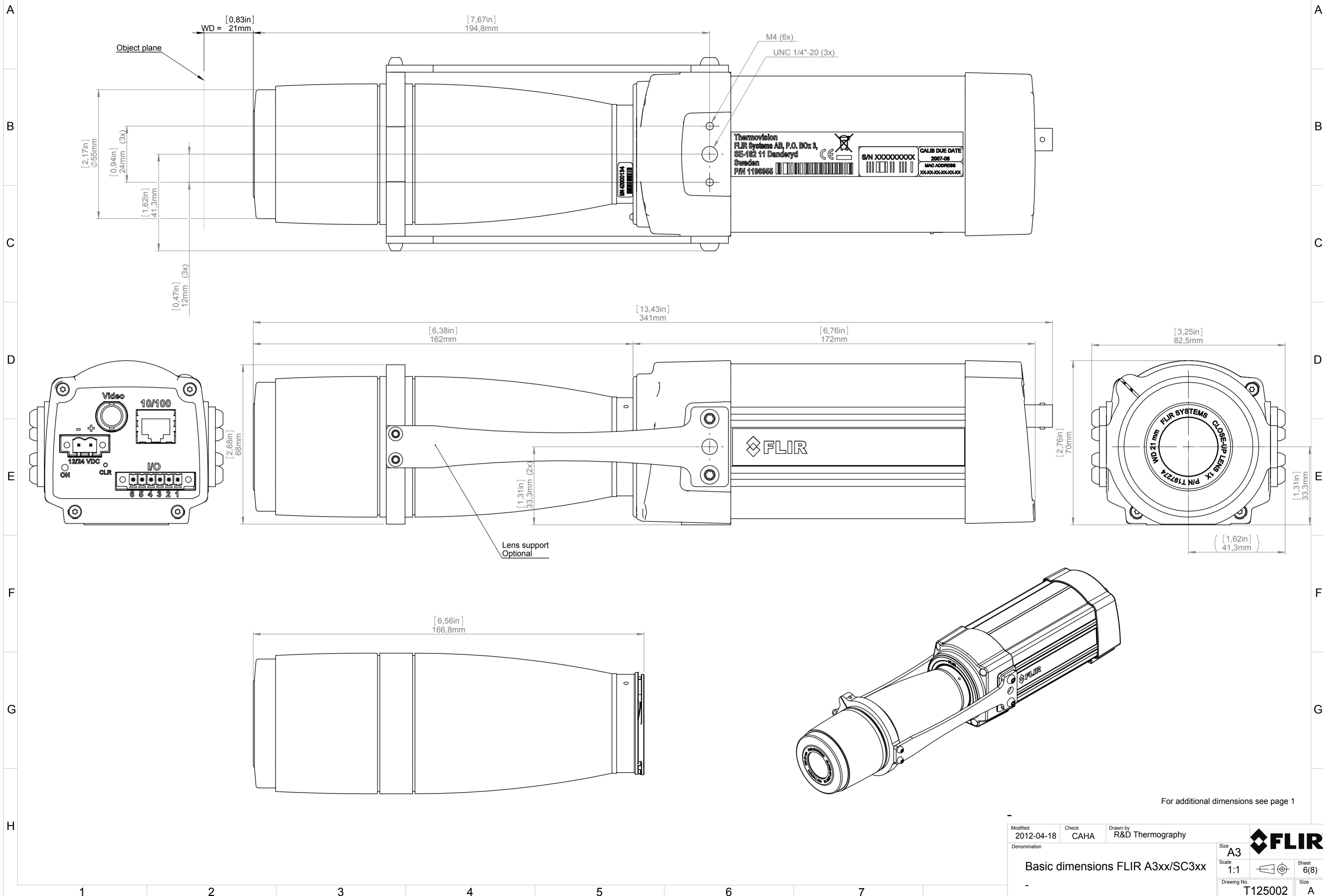
For additional dimensions see page 1

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Denomination			
Basic dimensions FLIR A3xx/SC3xx		Size A3 Scale 1:1 Drawing No. T125002	Sheet 5(8) Size A



# Camera with Close-up lens 1X (25 µm) incl support

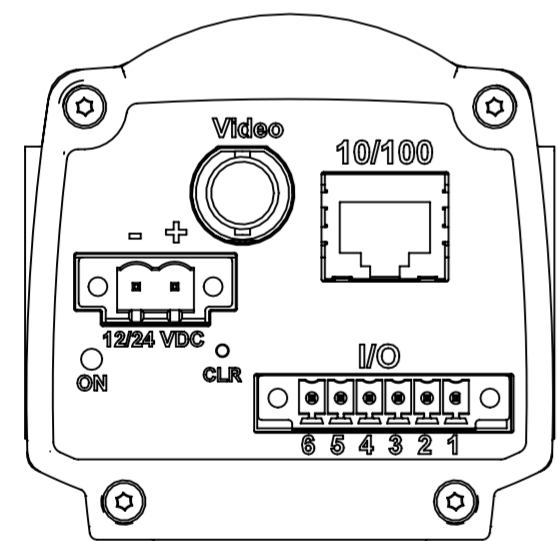
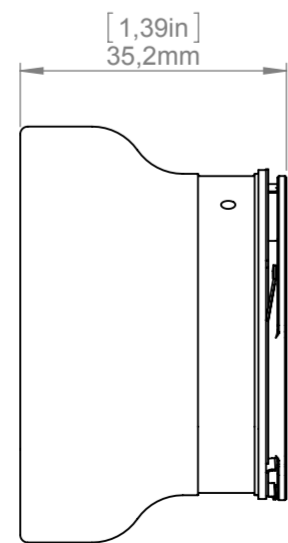
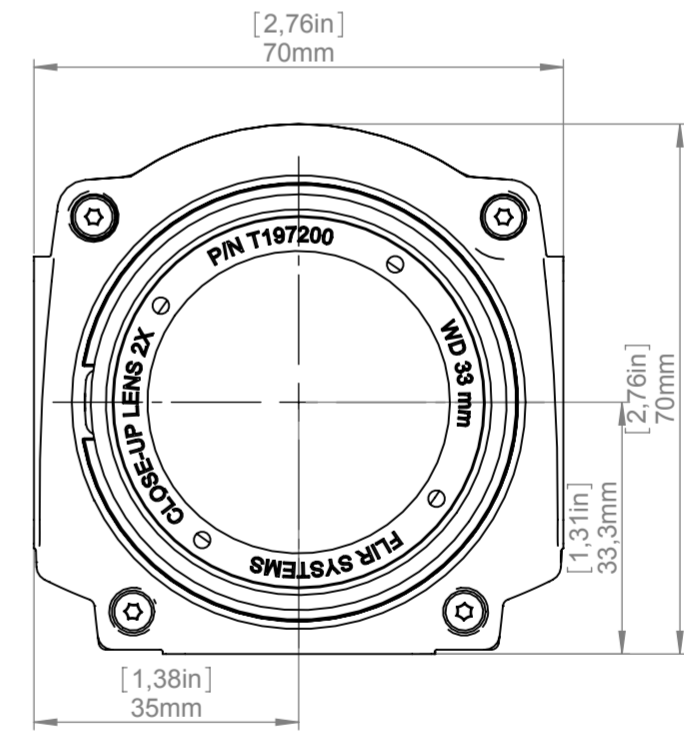
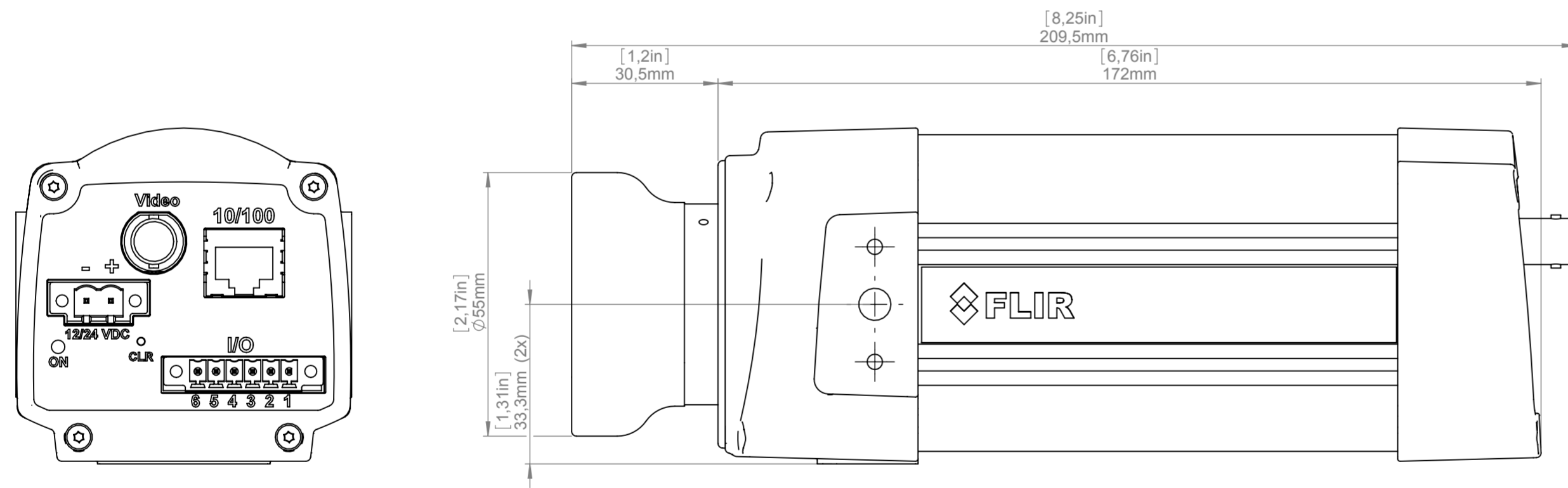
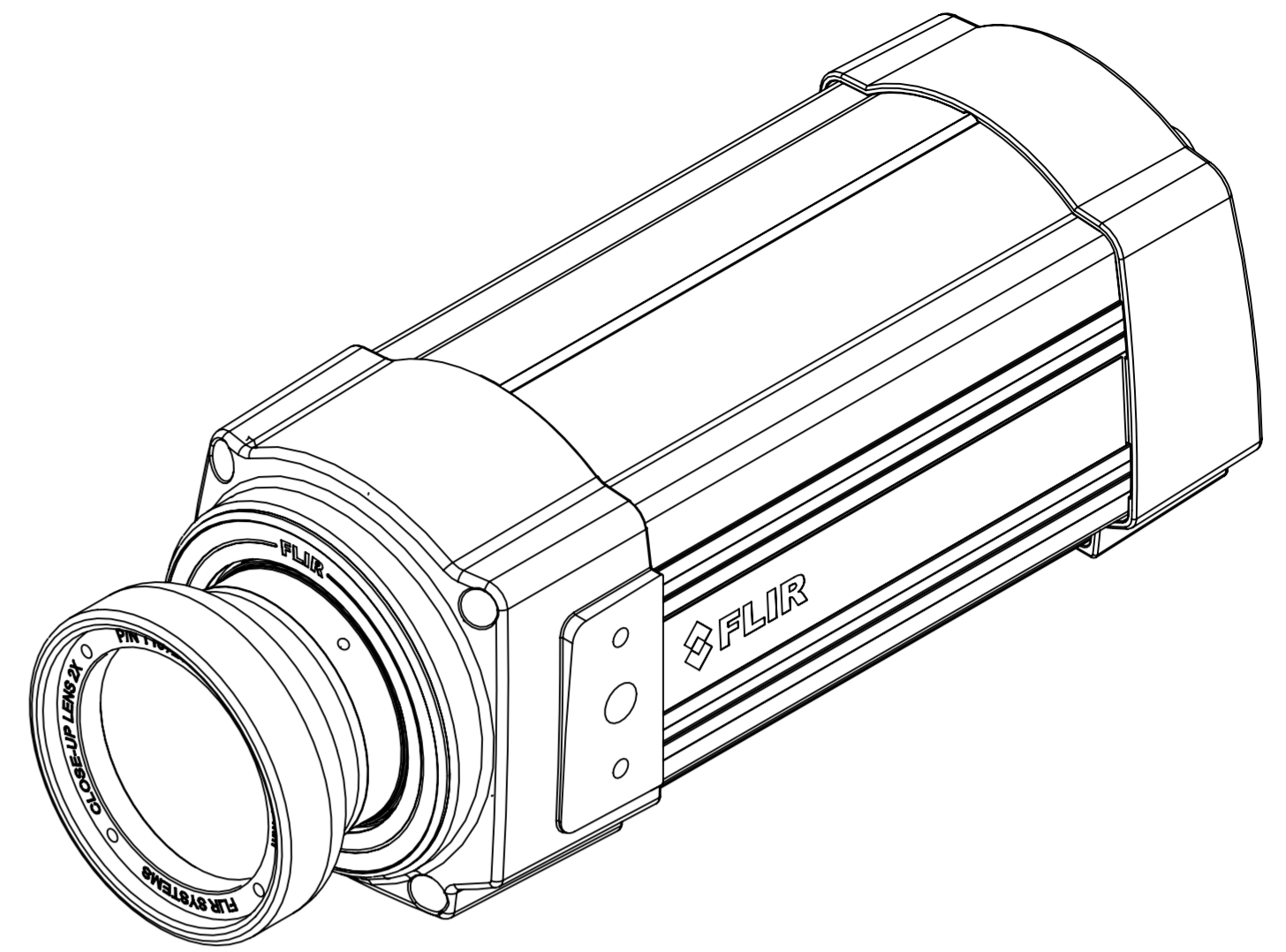
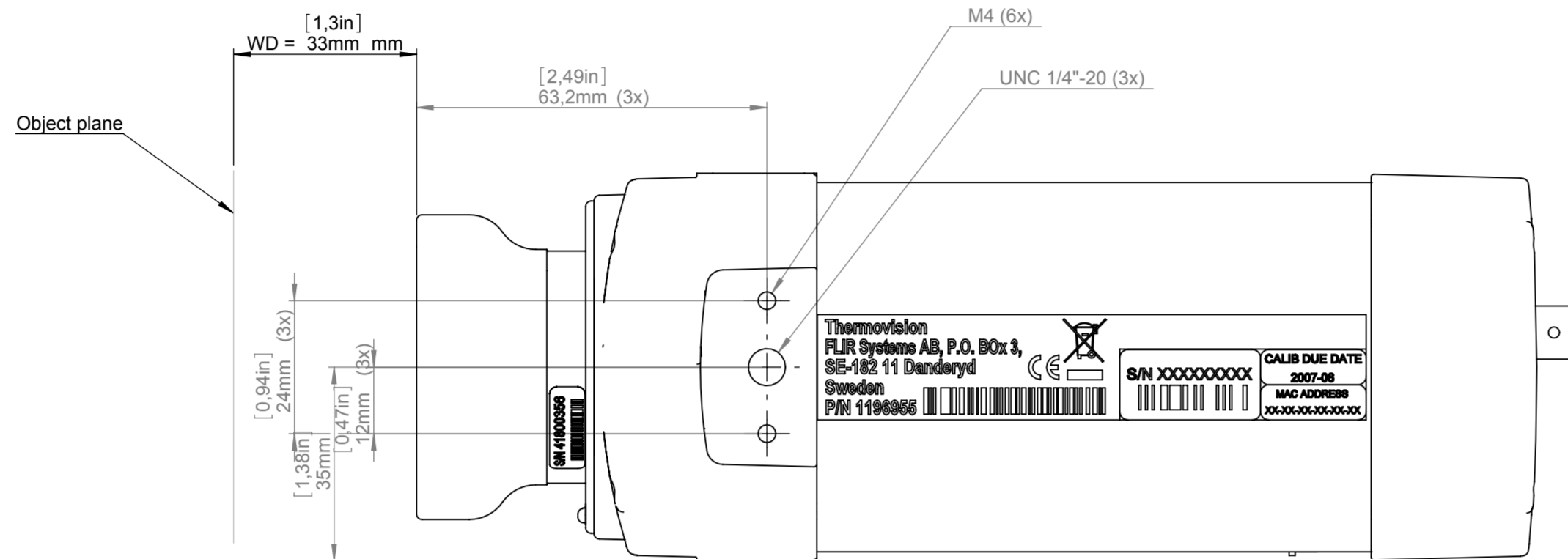


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# Camera with Close-up lens 2X (50 μm)

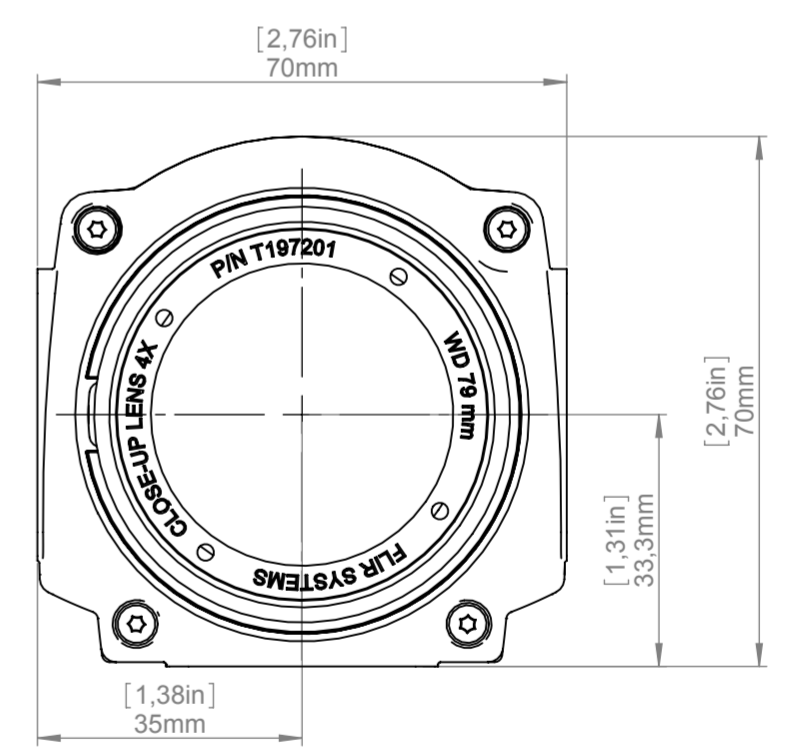
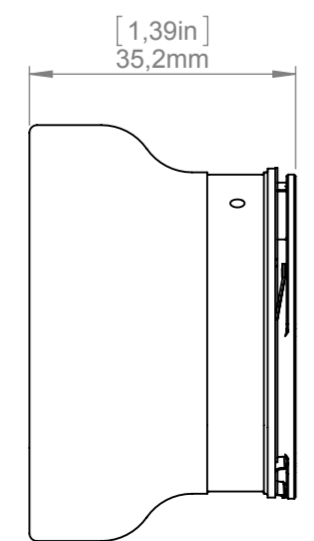
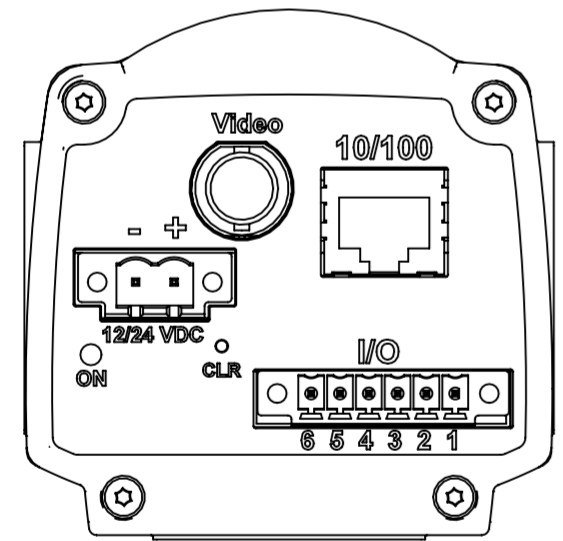
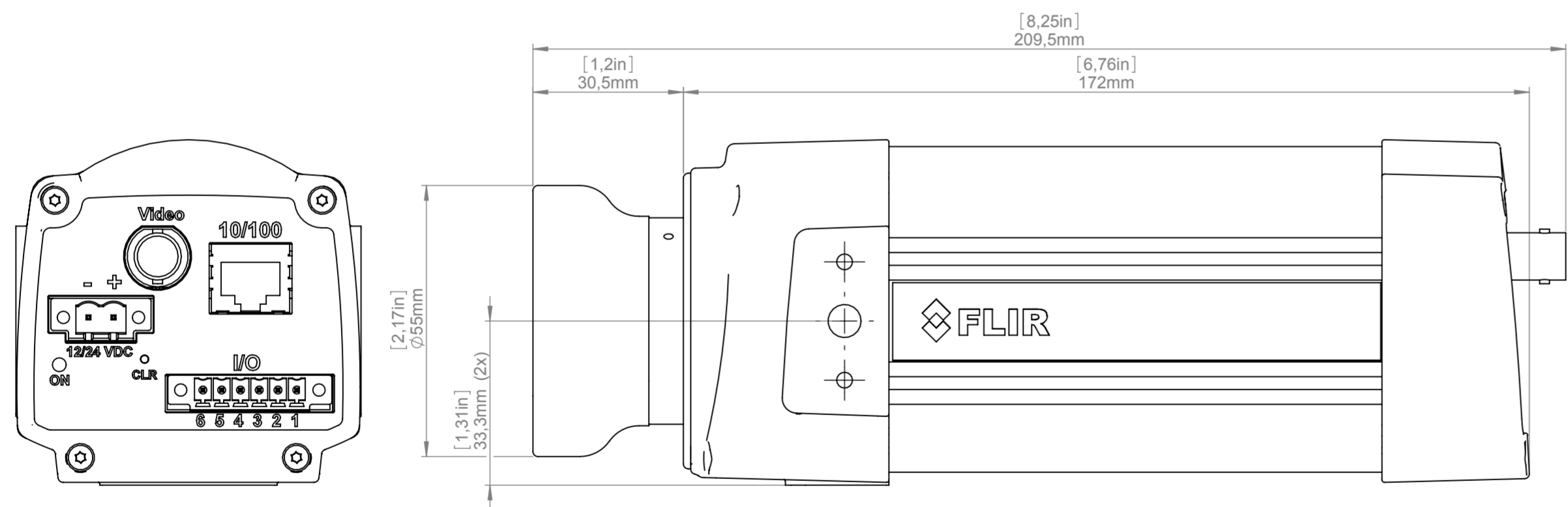
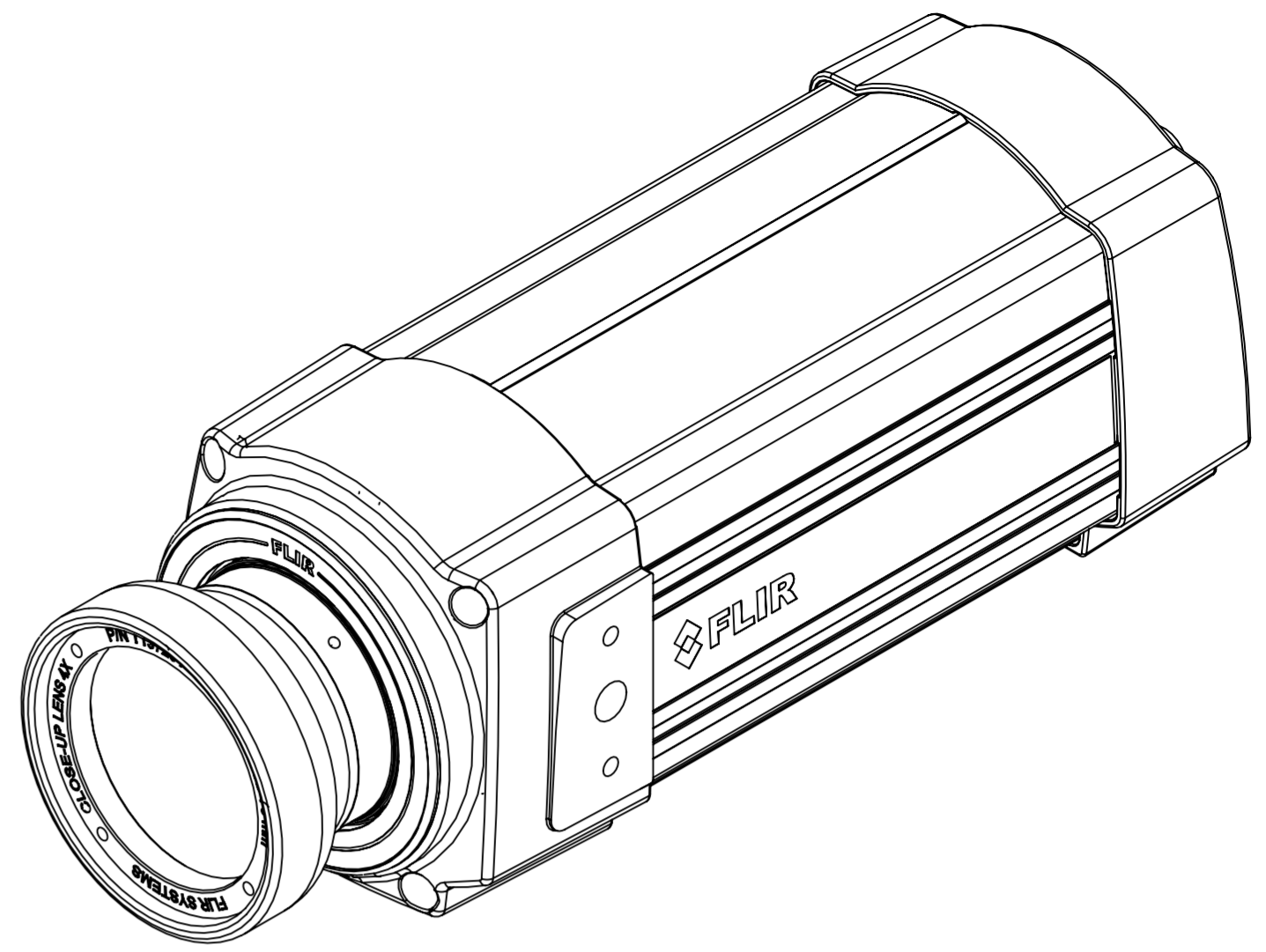
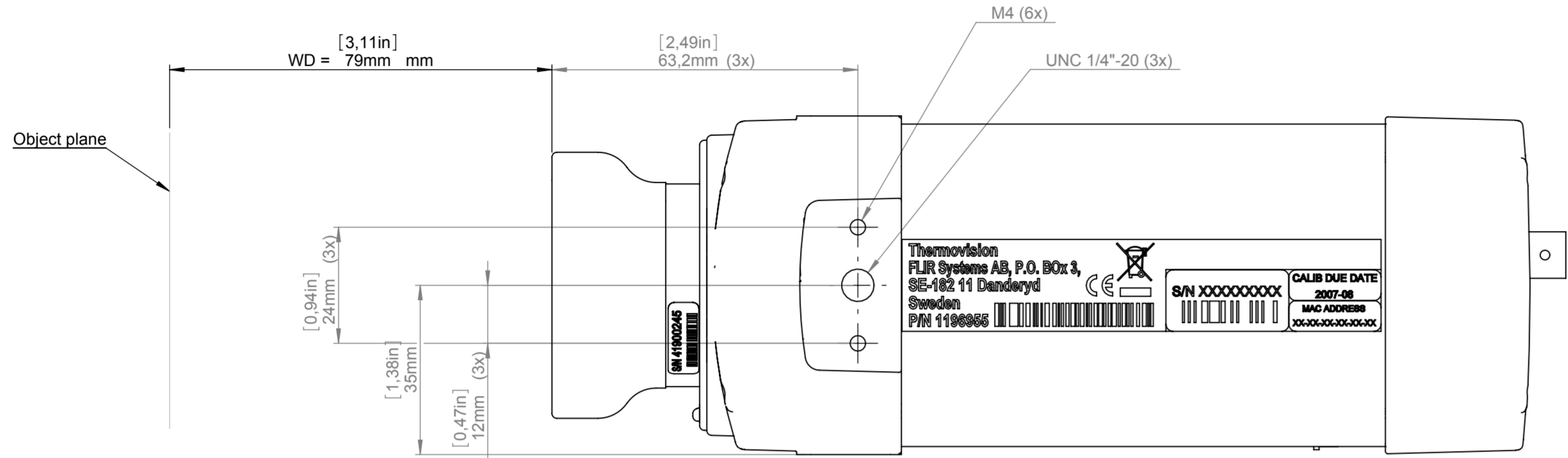


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# Camera with Close-up lens 4X (100 μm)



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