

TECHSPEC® 0.151X, 1/1.8" C-Mount TitanTL® Telecentric Lens

#34-000



TitanTL® Telecentric Lens

TECHSPEC® TitanTL® Telecentric Lenses are designed for machine vision systems and metrology applications that require a large field of view. These lenses feature large maximum sensor formats, a variety of working distance and magnification options, and a rear filter holder on the back of the lenses to allow for easy filter integration. On our 118mm, 182mm and 242mm FOV versions, the integrated mounting flange allows for ease of securing each lens without requiring an additional mount and provides an easy to locate reference plane. TECHSPEC® TitanTL® Telecentric Lenses contain shims that provide adjustment for variation in camera sensor location, an adjustable iris and a 3 set screw lens mount for simple rotational alignment to the camera. Typical applications include automotive and electronic inspection, measurement and gauging applications.

These lenses won the [Silver Level 2017 Innovators Award](#).

Note: Detailed inspection reports included with each lens.

Weight (kg):	0.72
Resolution, Image Space:	70 lp/mm @ 35% (MTF, open)
Coating:	$\lambda/4$ MgF ₂
Depth of Field (mm):	± 17.1 mm (20% @ 20 lp/mm, open)
Resolution, Image Space MTF @ F8:	70 lp/mm @ 35%
Rear Filter Diameter (mm):	12.7
Typical Distortion @ 520nm (%):	<0.04
Typical Telecentricity @ 520nm (°):	<0.1

Optical

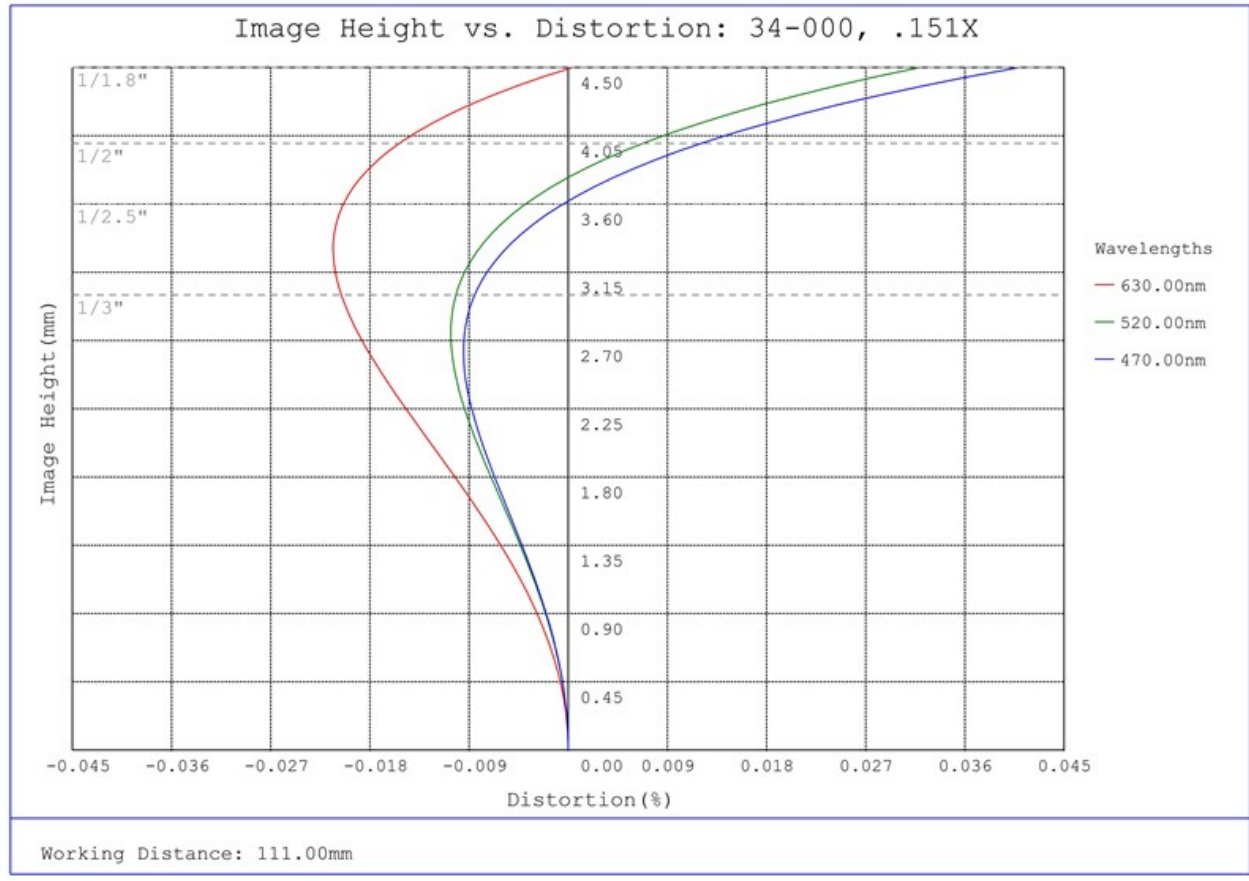
Horizontal Field of View, 1/2" Sensor:	42.4mm
Numerical Aperture NA, Object Side:	0.0094
Horizontal Field of View, 1/1.8" Sensor:	47.8mm
Primary Magnification PMAG:	0.151X
Maximum Sensor Format:	1/1.8"
Working Distance (mm):	111
Aperture (f#):	f/8 - f/16
FOV @ Max Sensor Format, H x V (mm):	47.7 x 35.8
Lens Wavelength Range:	VIS

Mechanical

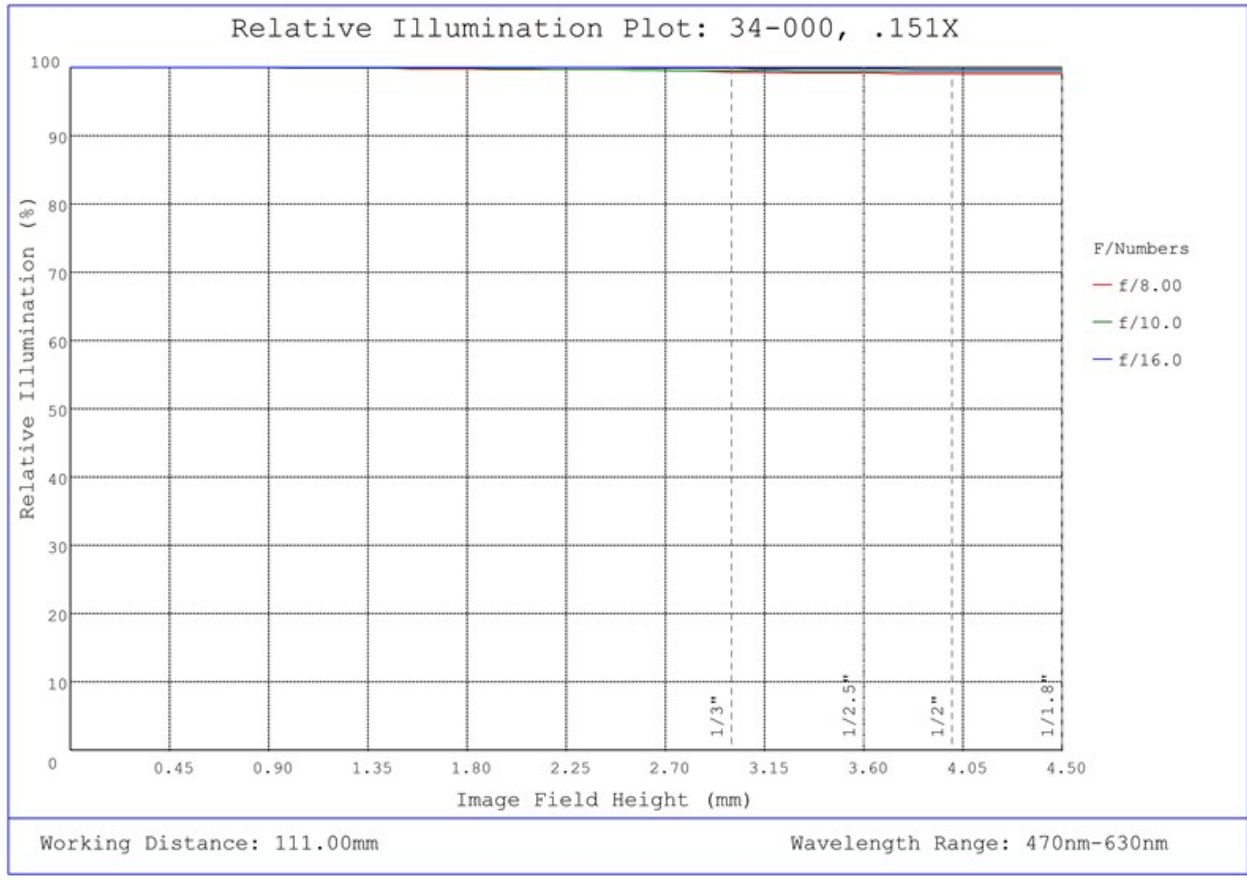
Filter Thread:	M72 x 0.75 (Female)
Number of Elements (Groups):	6 (4)
Mount:	C-Mount

General

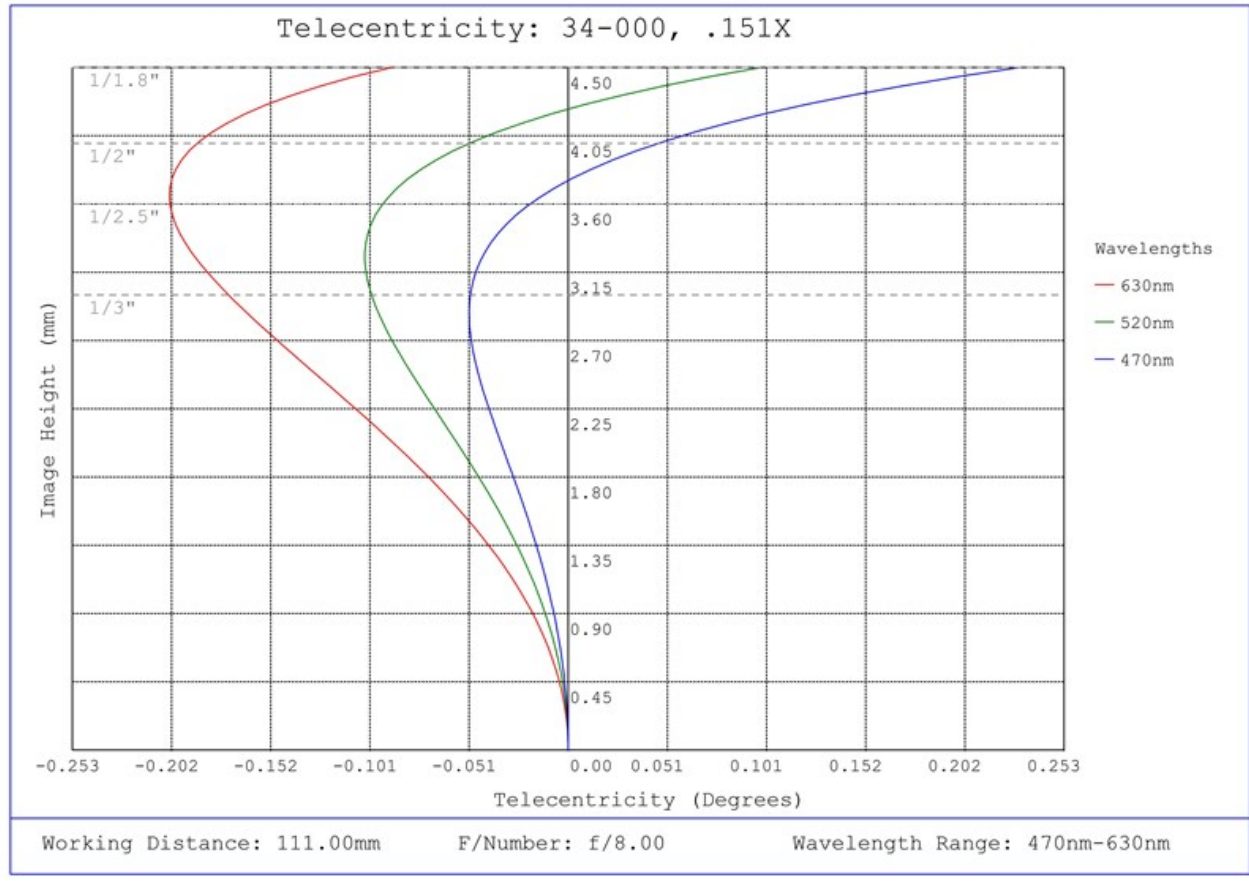
Type:	Telecentric Lens
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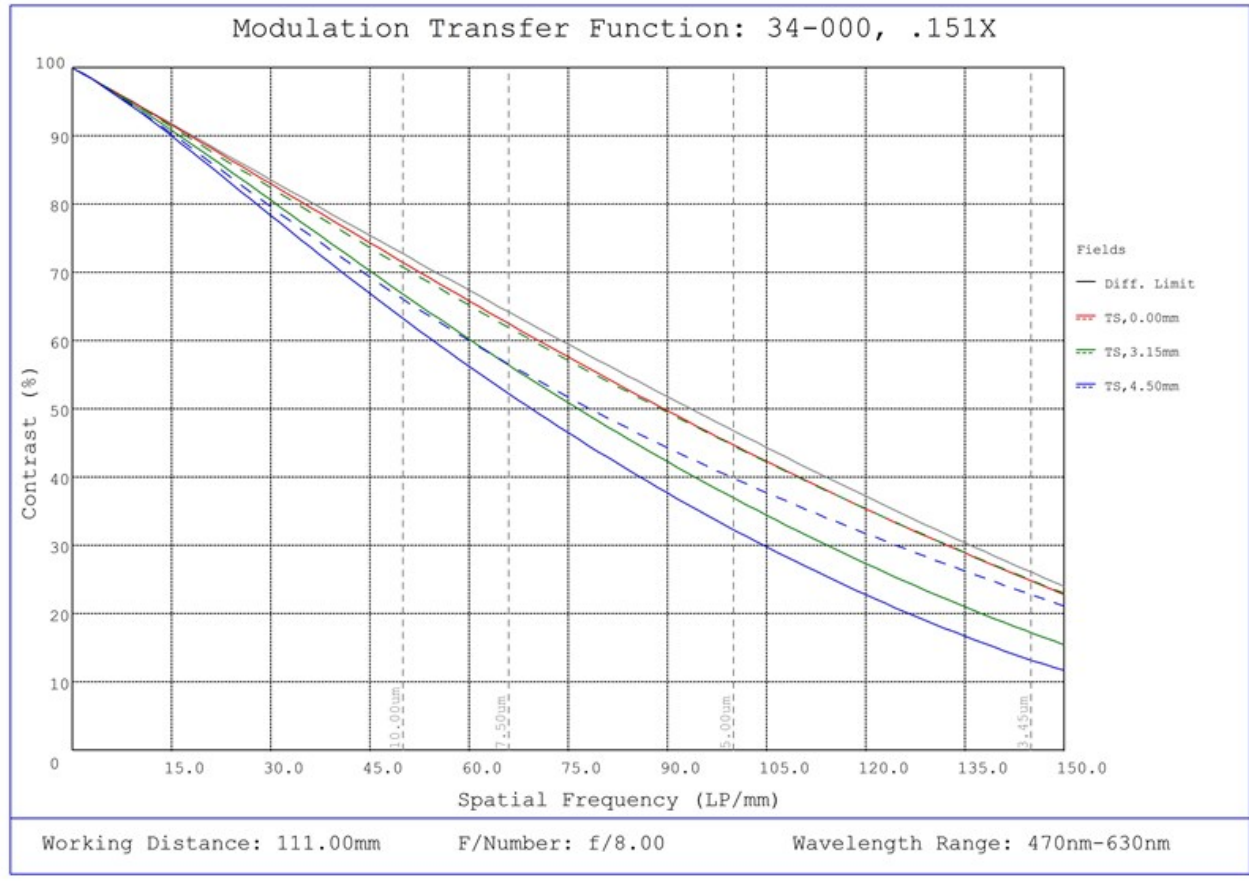
#34-000, 0.151X, 1/1.8" C-Mount TitanTL® Telecentric Lens, Distortion Plot



#34-000, 0.151X, 1/1.8" C-Mount TitanTL® Telecentric Lens, Relative Illumination Plot



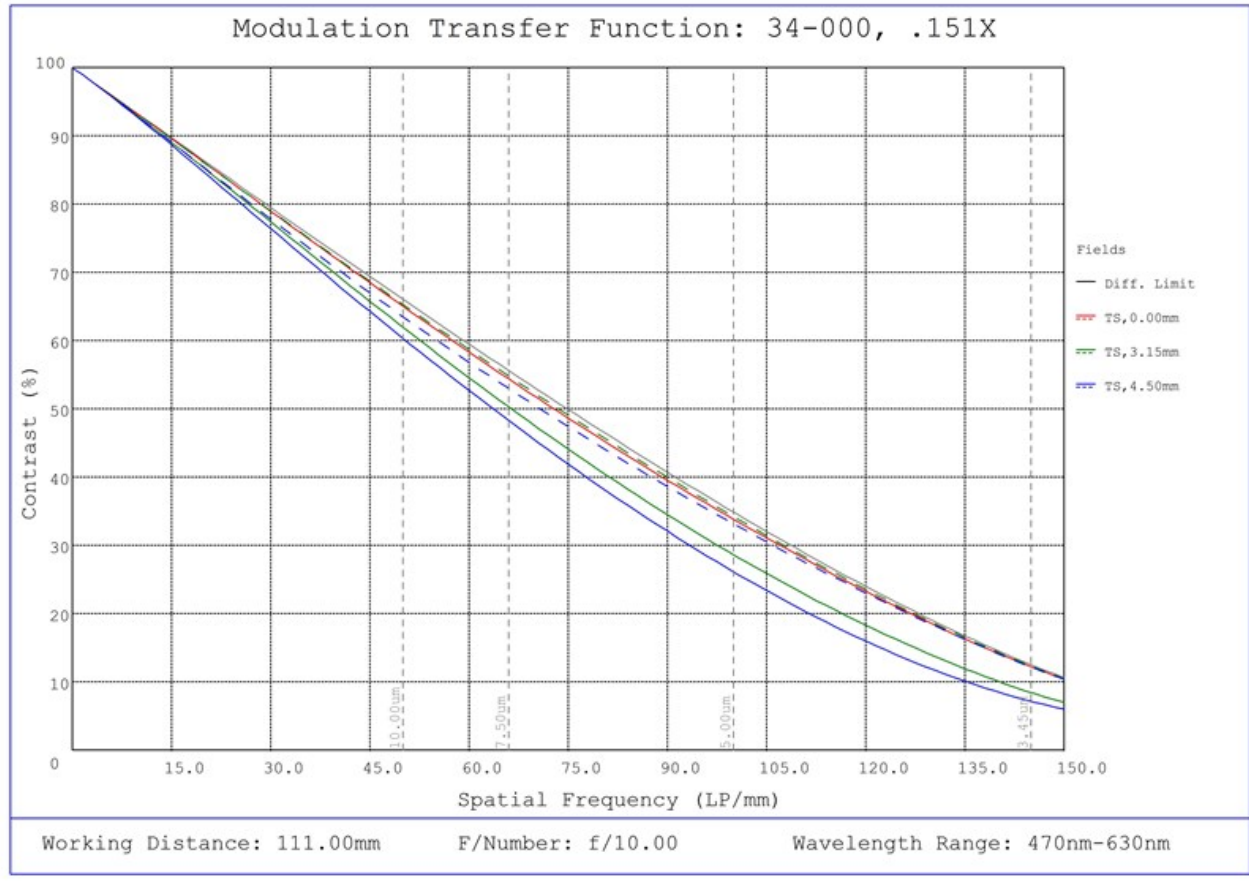
#34-000, 0.151X, 1/1.8" C-Mount TitanTL® Telecentric Lens, Telecentricity Plot



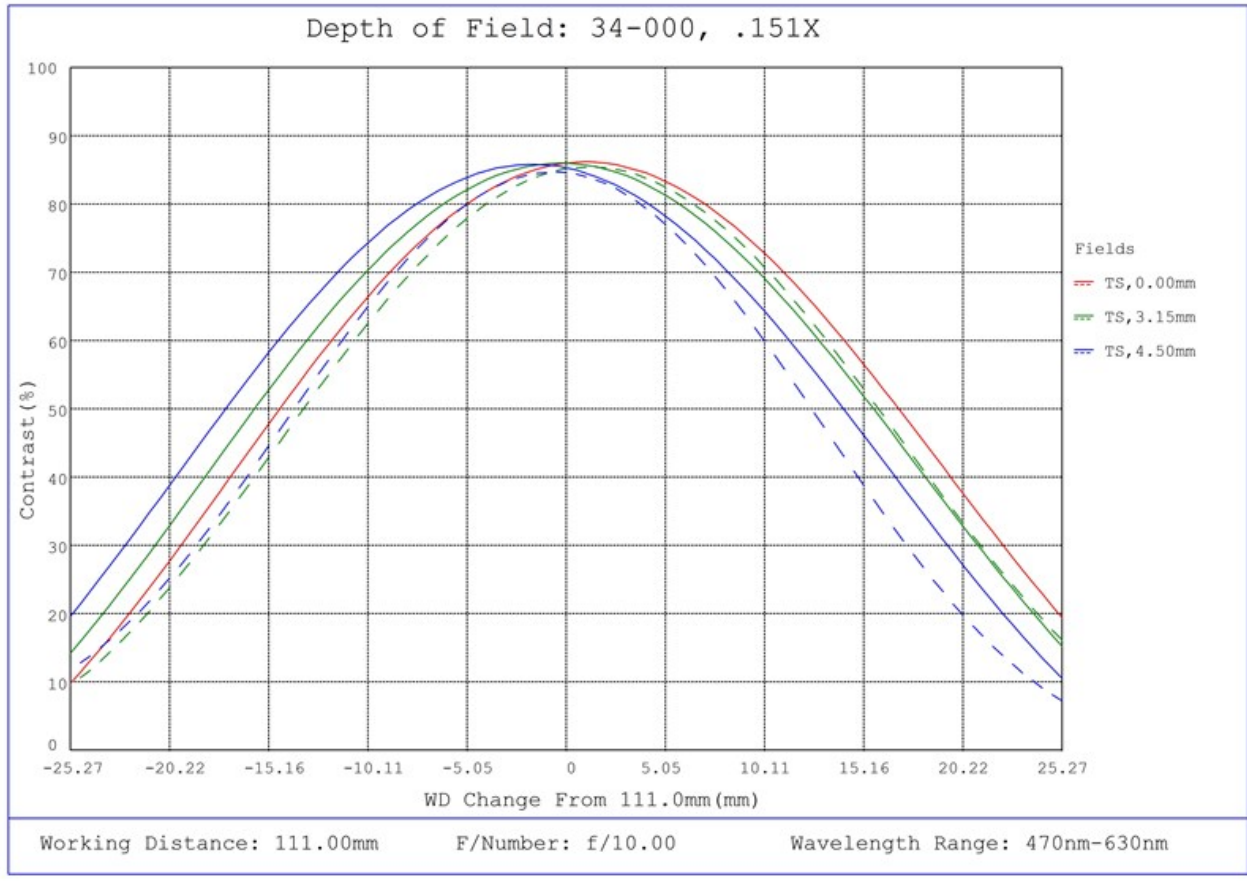
#34-000, 0.151X, 1/1.8" C-Mount TitanTL® Telecentric Lens, Modulated Transfer Function (MTF) Plot, 111mm Working Distance, f8



#34-000, 0.151X, 1/1.8" C-Mount TitanTL® Telecentric Lens, Depth of Field Plot, 111mm Working Distance, f8



#34-000, 0.151X, 1/1.8" C-Mount TitanTL® Telecentric Lens, Modulated Transfer Function (MTF) Plot, 111mm Working Distance, f10



#34-000, 0.151X, 1/1.8" C-Mount TitanTL® Telecentric Lens, Depth of Field Plot, 111mm Working Distance, f10



September 30, 2023

To Whom It May Concern,

This document certifies that the product stated below has been reviewed as requested by Edmund Optics:

<i>Stock No.</i>	<i>Description</i>
34-000	0.151X, 1/1.8" C-Mount TitanTL® Telecentric Lens

This item is EU RoHS (2011/65/EU) compliant without the use of exemptions.

This certification means that:

- EO's suppliers have confirmed the material composition of this product.
- EO has implemented rigorous procedures to document this compliance.
- The information provided may, or may not, be based upon actual test data, or on information from our Vendors, Raw Material Suppliers or Subcontractors.



Jay Budd, Director of Corporate Compliance
September 30, 2023

Edmund Optics Inc. - 101 E Gloucester Pike, Barrington, NJ 08007 | 1-800-363-1992 | Compliance@edmundoptics.com



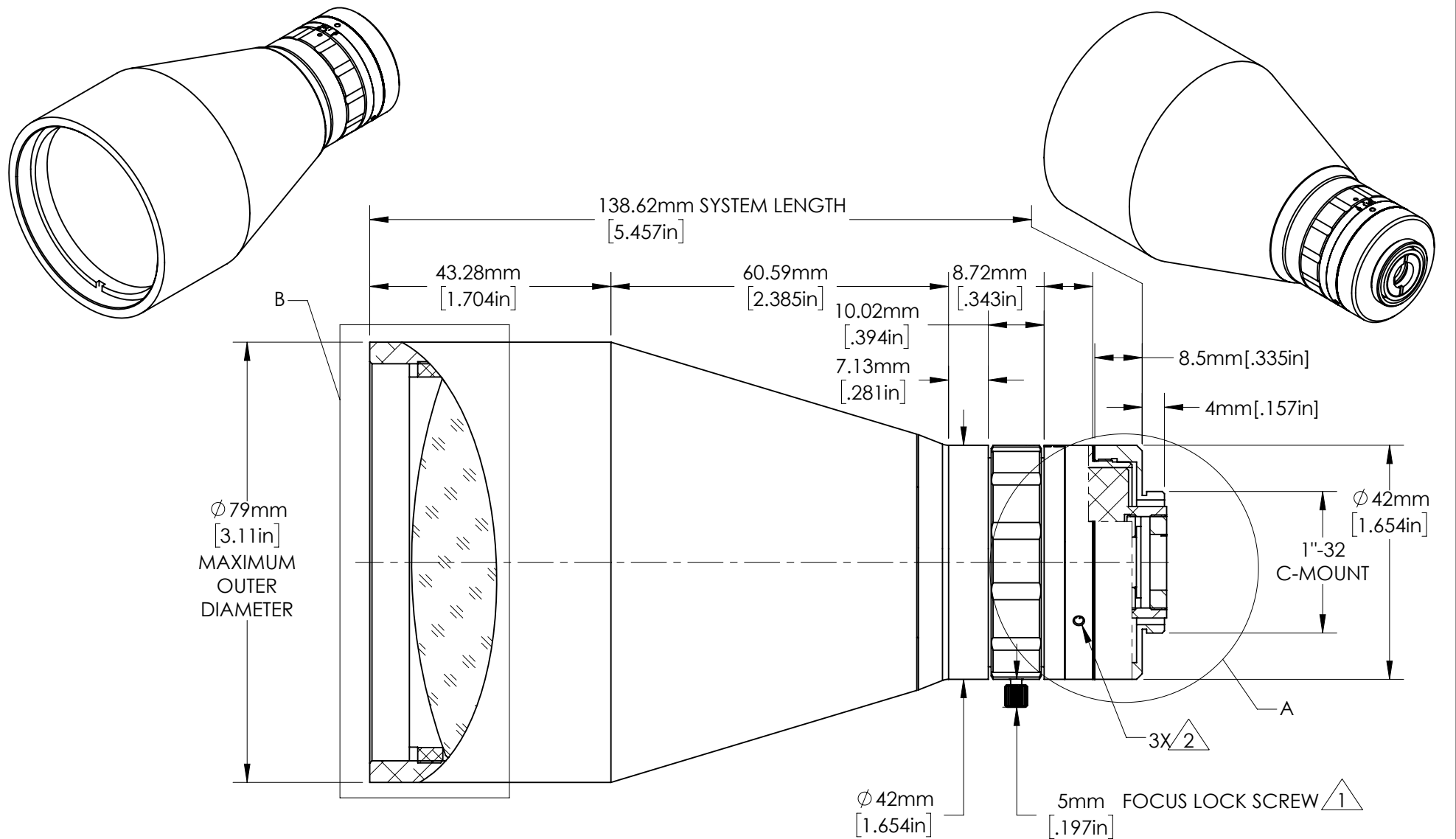
September 30, 2023

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34-000	0.151X, 1/1.8" C-Mount TitanTL® Telecentric Lens

Edmund Optics certifies that all articles included in this shipment are in compliance with the terms and conditions of this order. The company also certifies that the articles included in this shipment are in accordance to all agreed upon specifications and quality assurance provisions. Please call 1-800-363-1992 should any questions arise from this shipment.



Jeff Harvey- EVP of Operations



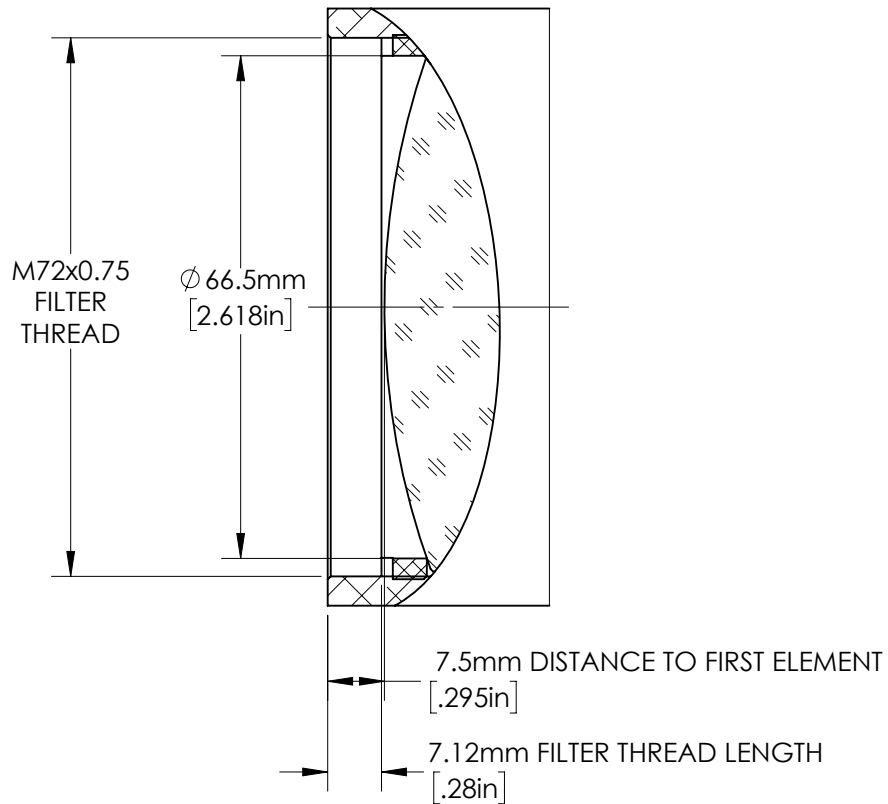
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PARTS TO THIS DRAWING

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TITLE	0.151X, 1/1.8" C-Mount TitanTL® Telecentric Lens	
DWG NO	34000	SHEET 1 OF 2

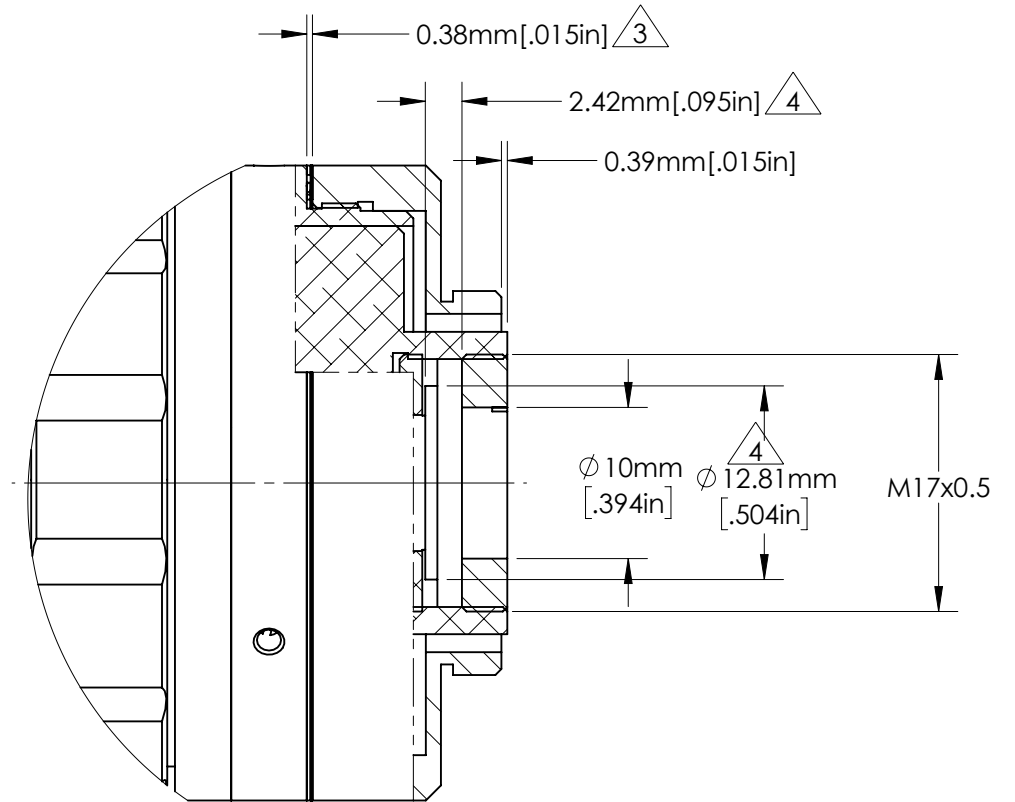
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DETAIL B

NOTES:

- 1. INCLUDES OPTIONAL RECESSED SET SCREW.
- 2. M2 SET SCREWS ALLOW LENS TO ROTATE ABOUT C-MOUNT.
- 3. FACTORY INSTALLED SPACER(S).
- 4. SPACE FOR A SEPARATELY PURCHASED FILTER.



DETAIL A
 FILTER MOUNTING DETAILS

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DWG NO	34000	SHEET 2 OF 2

