

TECHSPEC® 0.5X CobaltTL Telecentric Lens

#62-911



0.5X Magnification

TECHSPEC® CobaltTL Telecentric Lenses are designed for semiconductor and electronics inspection, measurement, and gauging applications. These telecentric lenses achieve high light throughput with industry leading low $f/\#$ s. Featuring less than 0.015° telecentricity and low 0.013% distortion, these lenses are ideal for image stitching applications. These 17.6mm diagonal sensor format lenses are compatible with the Sony IMX304 1.1" sensors and other similar format sensors such as the Sony IMX183. TECHSPEC® CobaltTL Telecentric Lenses produce unparalleled levels of contrast yielding maximum image quality with the highest degree of measurement accuracy. In-line versions provide the ability to rotate/reposition the inline illumination port to allow for maximum flexibility when machine building. TECHSPEC® CobaltTL Telecentric Lenses are compatible with high vibration environments and feature a removable recessed set screw for securely locking the iris in place.

Flange Distance (mm):	17.5
Coating:	425 - 675nm BBAR
Depth of Field (mm):	±4.16mm at f/10 (20% @ 20 lp/mm)

Optical

Horizontal Field of View, 1/2" Sensor:	16.09mm
Horizontal Field of View, 2/3" Sensor:	22.13mm
Horizontal Field of View, 1" Sensor:	32.19mm
Numerical Aperture NA, Object Side:	0.041
Horizontal Field of View, 1.1" Sensor:	28.32mm
Horizontal Field of View, 1/1.8" Sensor:	18.1mm
Typical Telecentricity @ 588nm (°):	<0.252
Typical Distortion @ 588nm (%):	<0.041
Primary Magnification PMAG:	0.5X
Maximum Sensor Format:	1.1"
Working Distance (mm):	175
Aperture (f/#):	f/6 - f/22
FOV @ Max Sensor Format, H x V (mm):	28.4 x 20.8
Lens Wavelength Range:	VIS

Mechanical

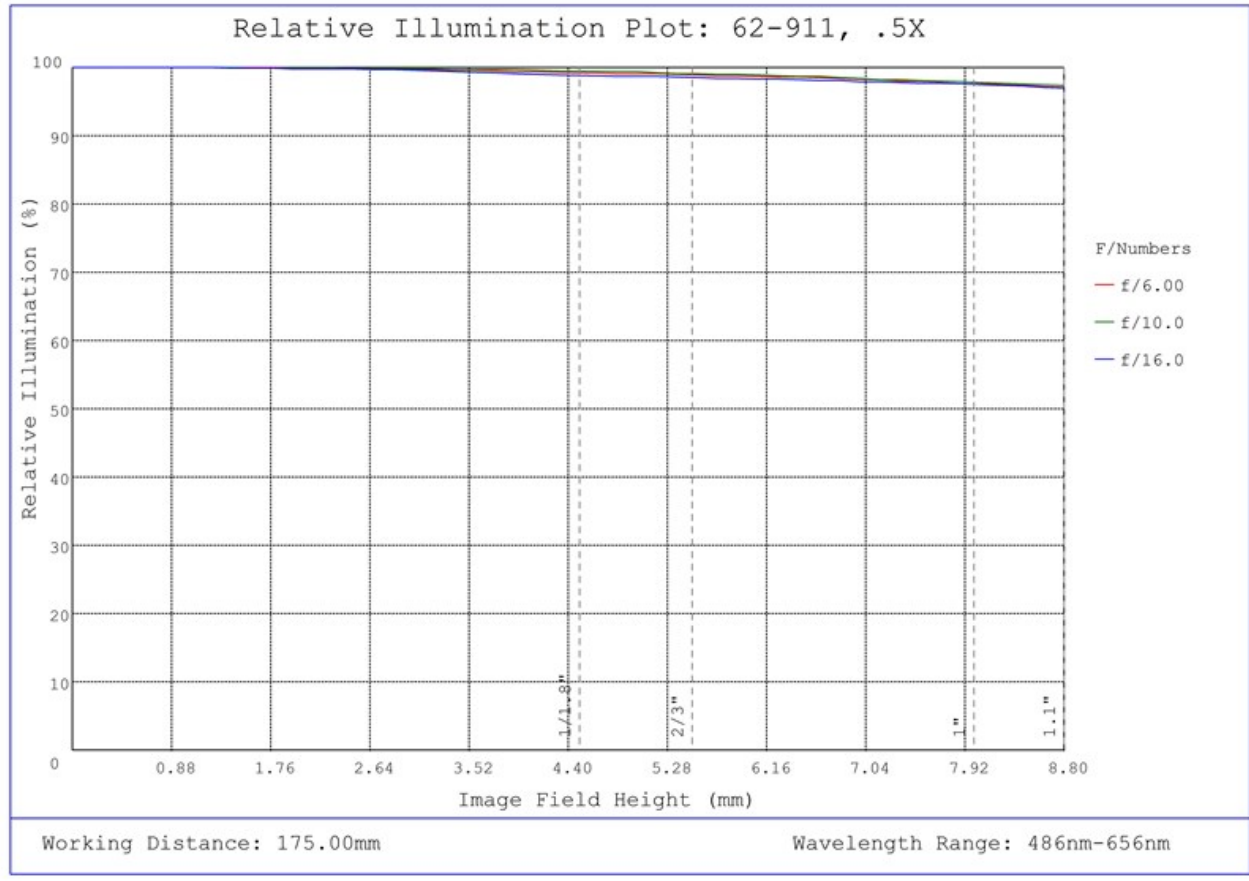
Length (mm):	172.90
Filter Thread:	M86 x 1.00 (Female)
Maximum Diameter (mm):	90.0
Weight (g):	1061
Number of Elements (Groups):	10 (7)
Mount:	C-Mount

General

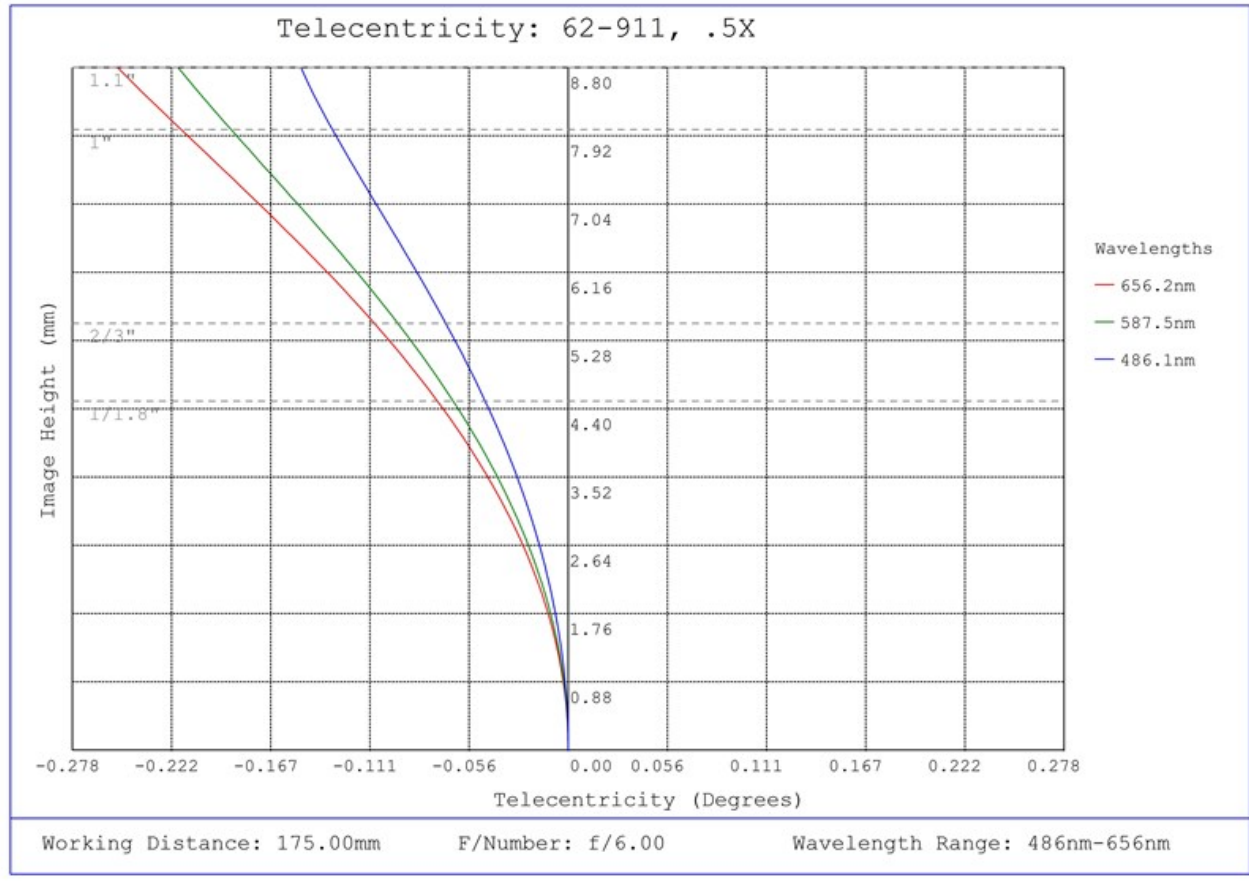
Stock No. of Mounting Clamp:	#63-441 Sold Separately
Note:	Lens will cover a 18mm diagonal sensor.
Type:	Telecentric Lens



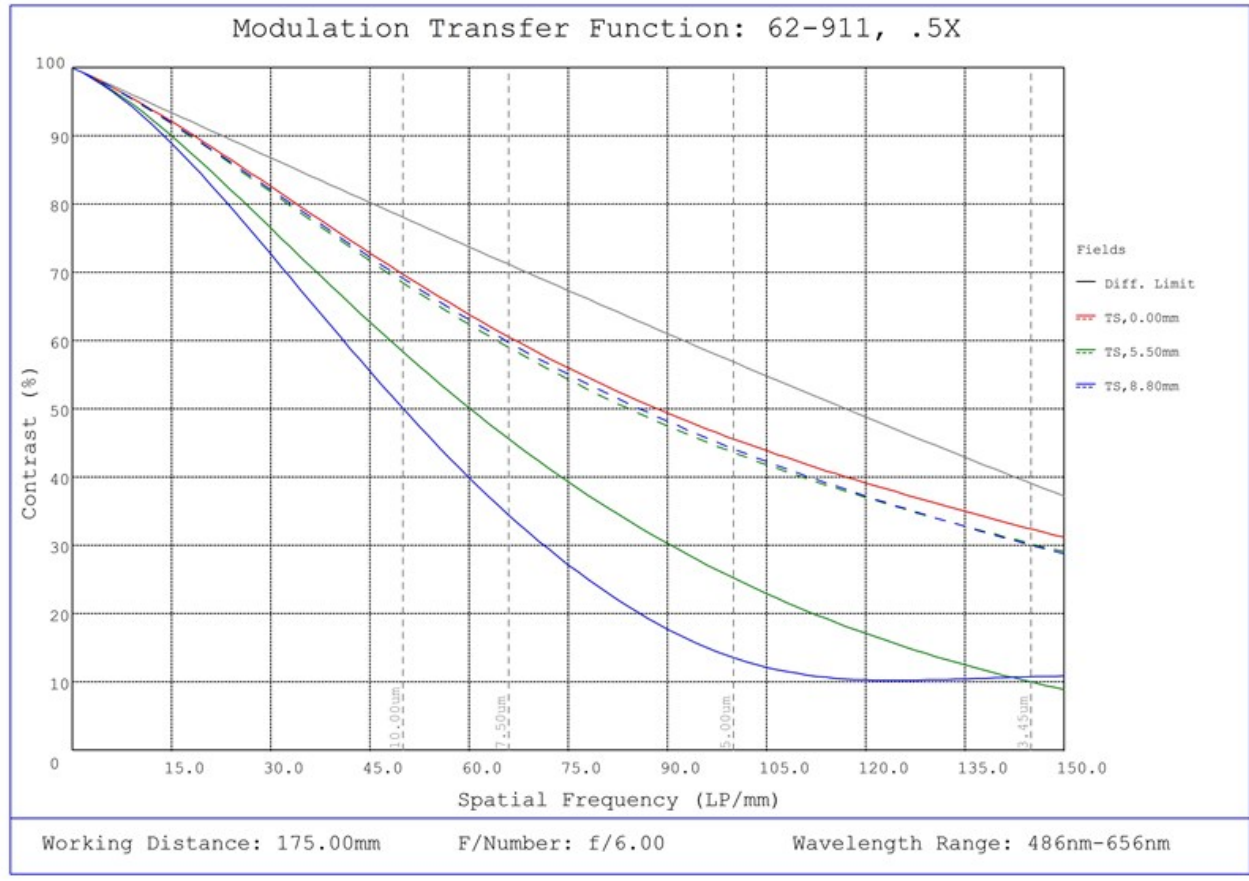
#62-911, 0.5X CobaltTL Telecentric Lens, Distortion Plot



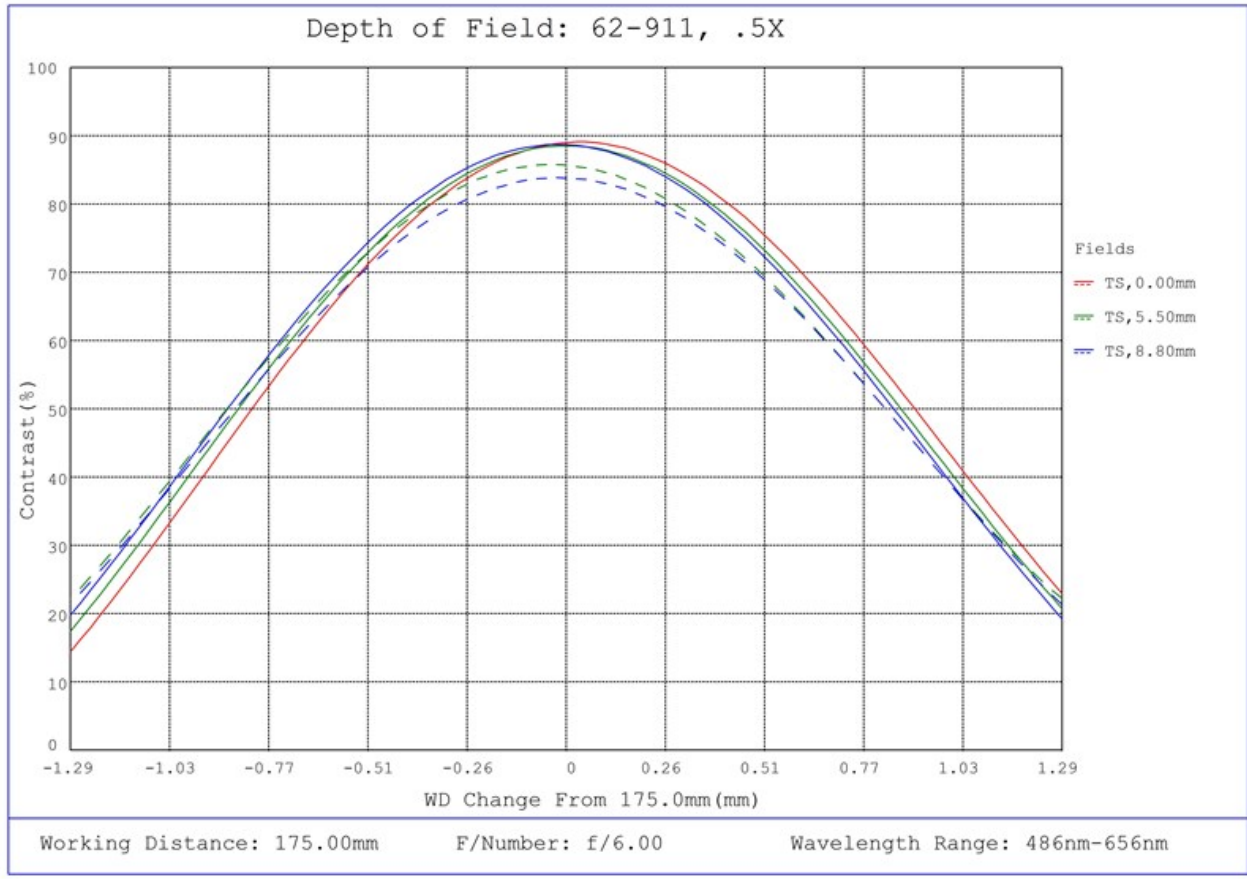
#62-911, 0.5X CobaltTL Telecentric Lens, Relative Illumination Plot



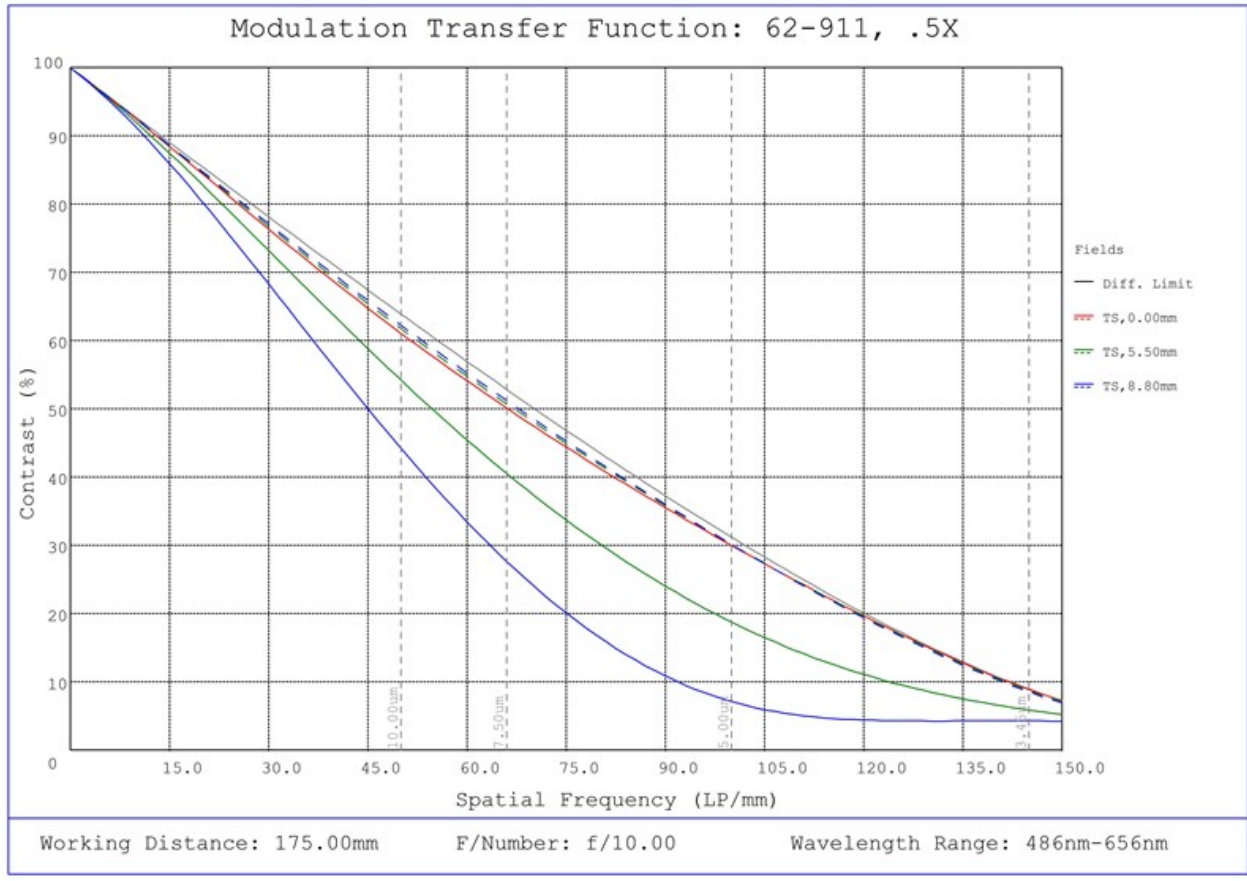
#62-911, 0.5X CobaltTL Telecentric Lens, Telecentricity Plot



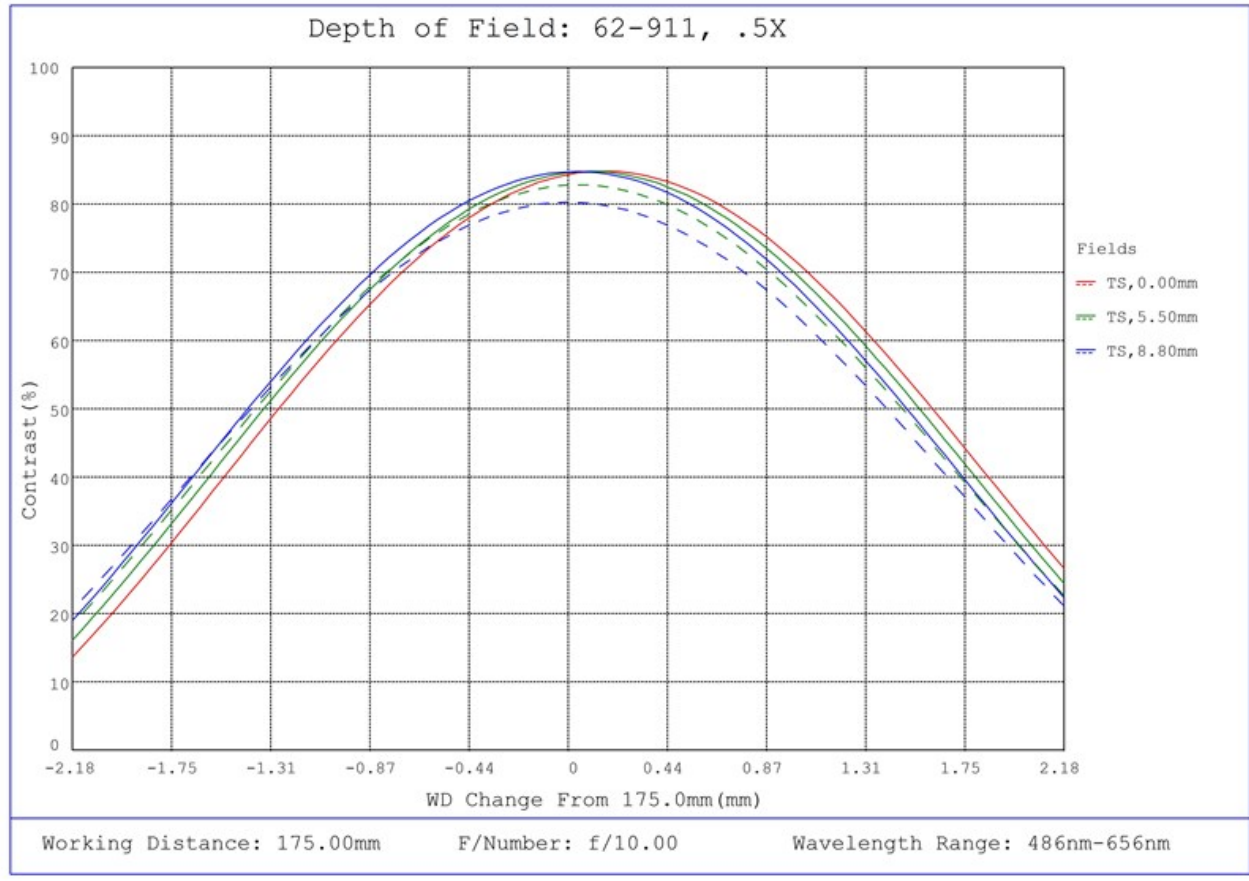
#62-911, 0.5X CobaltTL Telecentric Lens, Modulated Transfer Function (MTF) Plot, 175mm Working Distance, f6



#62-911, 0.5X CobaltTL Telecentric Lens, Depth of Field Plot, 175mm Working Distance, f6



#62-911, 0.5X CobaltTL Telecentric Lens, Modulated Transfer Function (MTF) Plot, 175mm Working Distance, f10



#62-911, 0.5X CobaltTL Telecentric Lens, Depth of Field Plot, 175mm Working Distance, f10



September 08, 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>
62-911	0.5X CobaltTL Telecentric Lens

This item is EU RoHS (2011/65/EU) exempt based on **Exemption 6c**: Copper alloy containing up to 4% lead by weight.

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 08, 2023Edmund Optics Inc. - 101 E Gloucester Pike, Barrington, NJ 08007 | 1-800-363-1992 | Compliance@edmundoptics.com

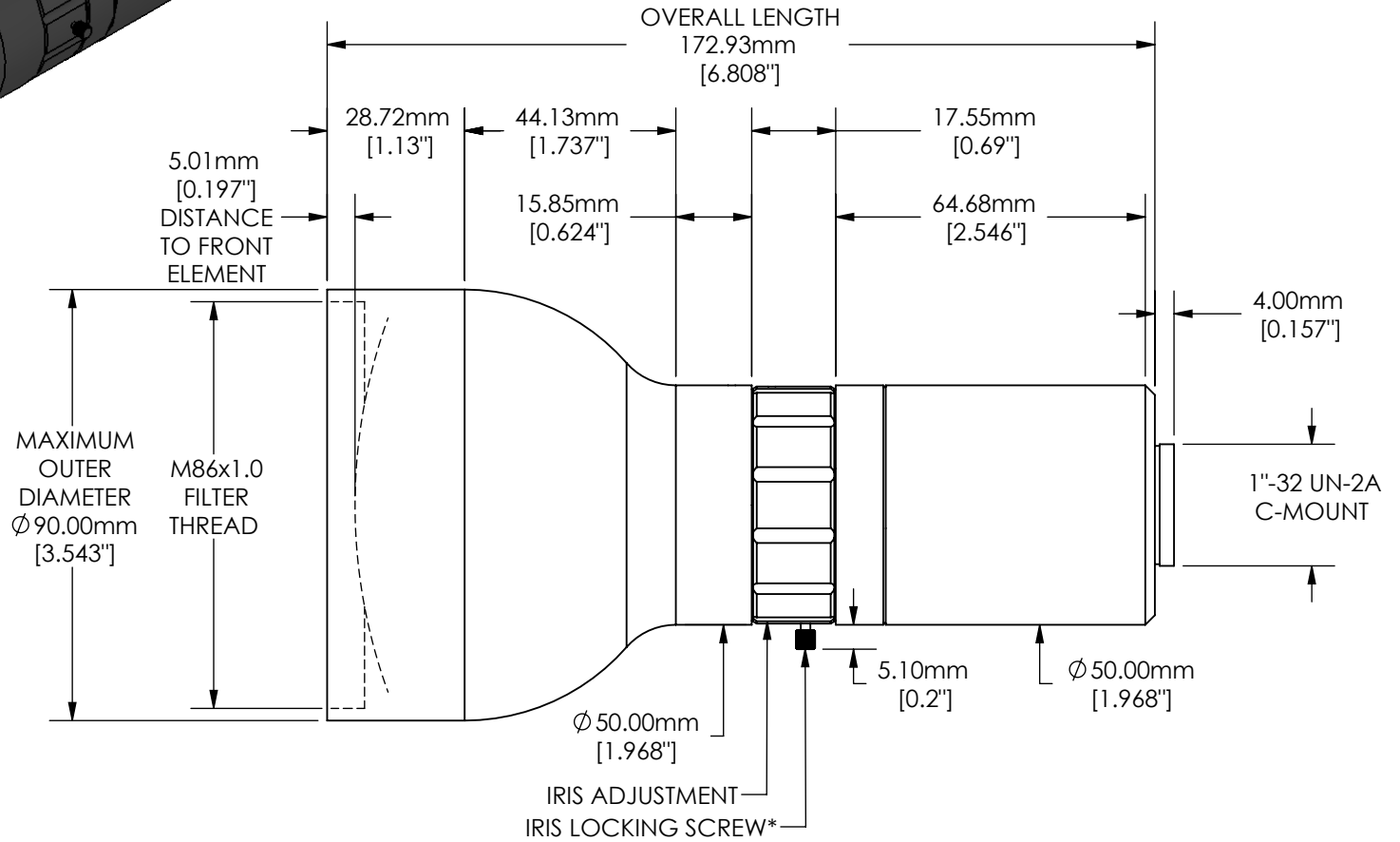
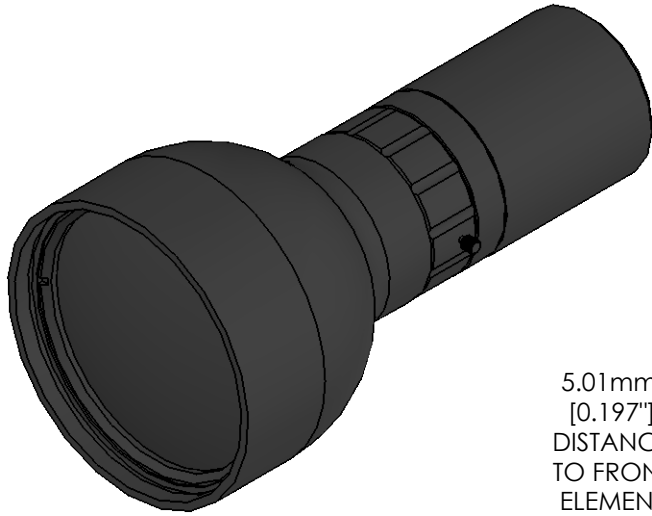
September 08, 2023

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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



* ALSO INCLUDES RECESSED SET SCREW OPTION

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PARTS TO THIS DRAWING**

SPECIFICATIONS SUBJECT TO CHANGE
WITHOUT NOTICE.
DIMENSIONS ARE FOR REFERENCE ONLY.
FOR DETAILED SPECIFICATIONS,
PLEASE REFER TO THE SPEC SHEET.

 **Edmund Optics**

TITLE	0.5X, 1" C-Mount PlatinumTL™ Telecentric Lens	
DWG NO	62911	SHEET 1 OF 1

