

TECHSPEC® 16mm, f/2.8 Ci Series Fixed Focal Length Lens

#85-350



16mm Focal Length

TECHSPEC® Ci Series Fixed Focal Length Lenses are a streamlined version of our C Series Fixed Focal Length Lenses. They feature the same low lens-to-lens variation and broadband anti-reflection (BBAR) coating for maximum light transmission, while offering reduced weight and size. An adjustable, lockable focus allows for setting and locking the best focus position for instrumentation integration. TECHSPEC® Ci Series Fixed Focal Length Lenses are designed specifically for volume integration into applications such as factory inspection and automation to benchtop biomedical devices. The Ci Series offers a wide range of aperture options, ensuring maximum flexibility of resolution, throughput, and depth of field.

Product Details

Type: Fixed Focal Length Lens

Physical & Mechanical Properties

Iris Option:	Fixed
Length (mm):	40.80
Maximum Diameter (mm):	26.5
Weight (g):	37
Maximum Rear Protrusion (mm):	1.09
Diameter (mm):	26.50

Optical Properties

Horizontal Field of View, 1/2" Sensor:	44.5mm - 22.7°
Horizontal Field of View, 2/3" Sensor:	61.4mm - 30.9°
Horizontal Field of View, 1/3" Sensor:	33.3mm - 17.1°
Maximum Image Circle (mm):	11.00
Numerical Aperture NA, Object Side:	0.0235
Horizontal Field of View @ Max Sensor Format:	61.4mm - 30.9°
Number of Elements (Groups):	7 (6)
Horizontal Field of View, 1/1.8" Sensor:	50.1mm - 25.2°
Horizontal Field of View, 1/2.5" Sensor:	39.6mm - 20.2°
Focal Length FL (mm):	16.00
Primary Magnification PMAG:	0.149
Working Distance (mm):	100 - ∞
Aperture (f/#):	f/2.8
Coating:	425 - 675nm BBAR
Coating Specification:	425 - 675nm BBAR
Entrance Pupil Position (mm):	19.19
Horizontal Field of View, 1/4" Sensor:	25mm - 12.8°
Object Space Principal Plane (mm):	21.30
Image Space Principal Plane (mm):	-3.00
Field of View at Max Sensor Format:	Horizontal: 59.7mm - 30.9° Vertical: 44.6mm - 23.4° Diagonal: 75mm - 38.2°
Maximum Distortion (%):	-0.77
Exit Pupil Position (mm):	-5.43
Lens Wavelength Range:	VIS

Sensor

Maximum Sensor Format: 2/3"

Threading & Mounting

Filter Thread:	M25.5 x 0.50 (Male)
Filter Thread Adapter:	#89-941 (Required)

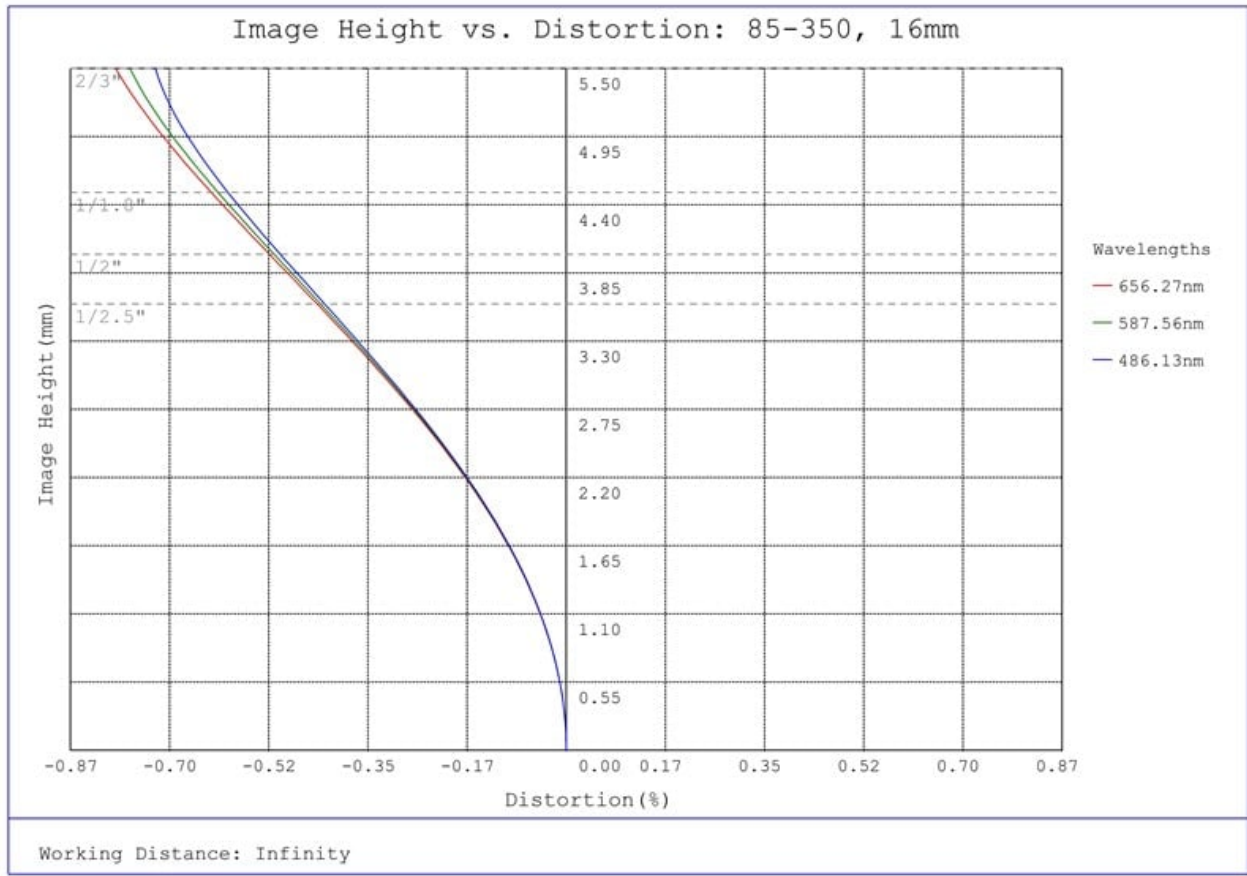
Front Thread: M22.0 x 0.75 (Male)

Mount: C-Mount

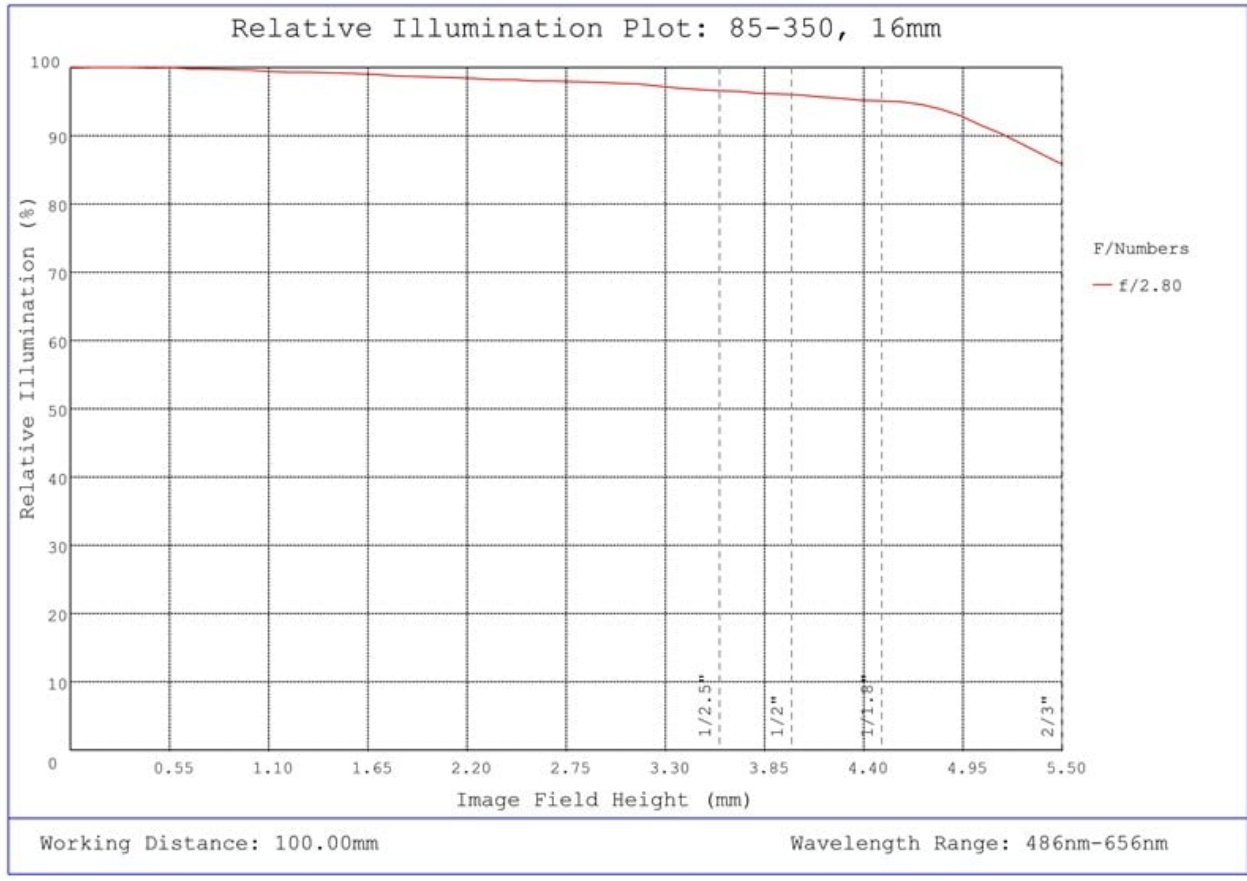
Environmental & Durability Factors

Storage Temperature (°C):

-20 to +60 For questions regarding operating temperature please contact our support team



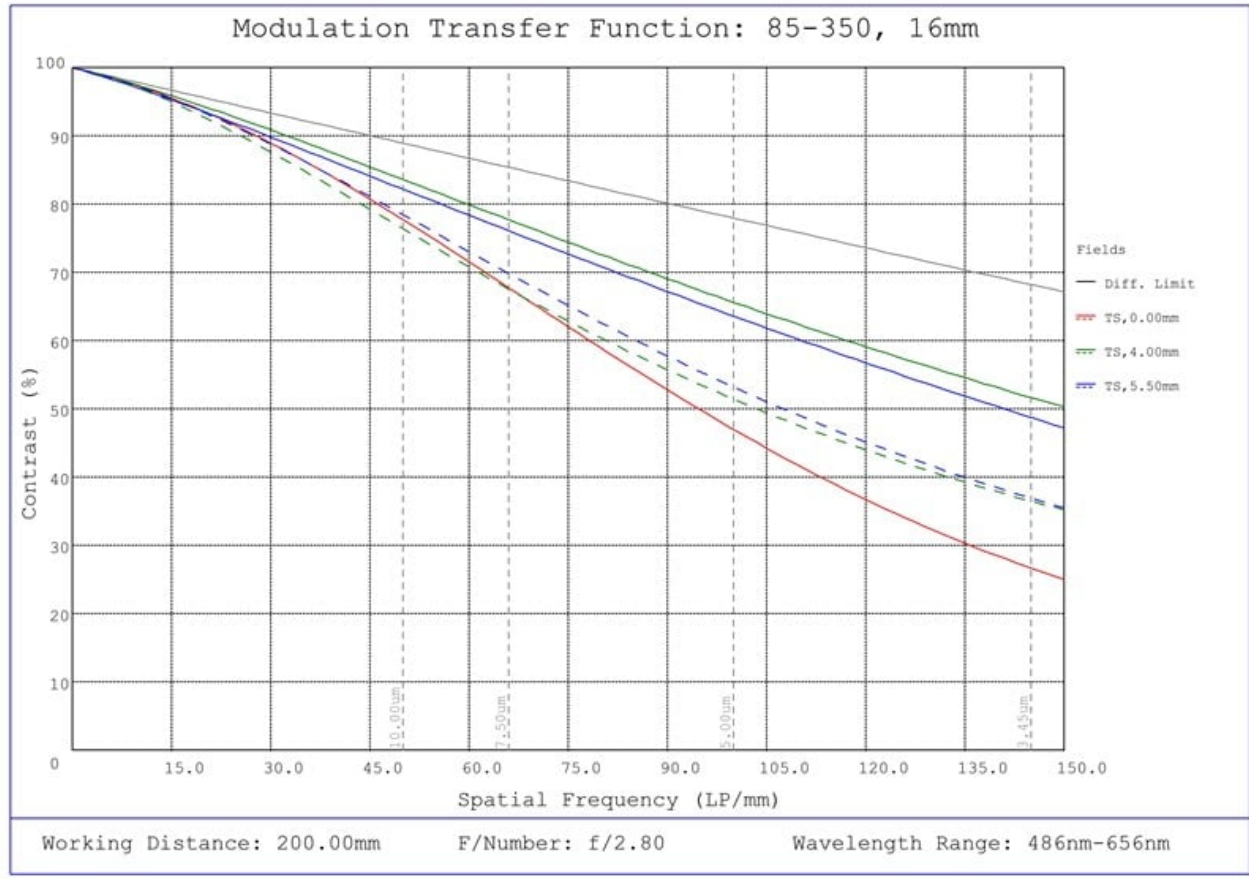
#85-350, 16mm, f/2.8 Ci Series Fixed Focal Length Lens, Distortion Plot



#85-350, 16mm, f/2.8 Ci Series Fixed Focal Length Lens, Relative Illumination Plot



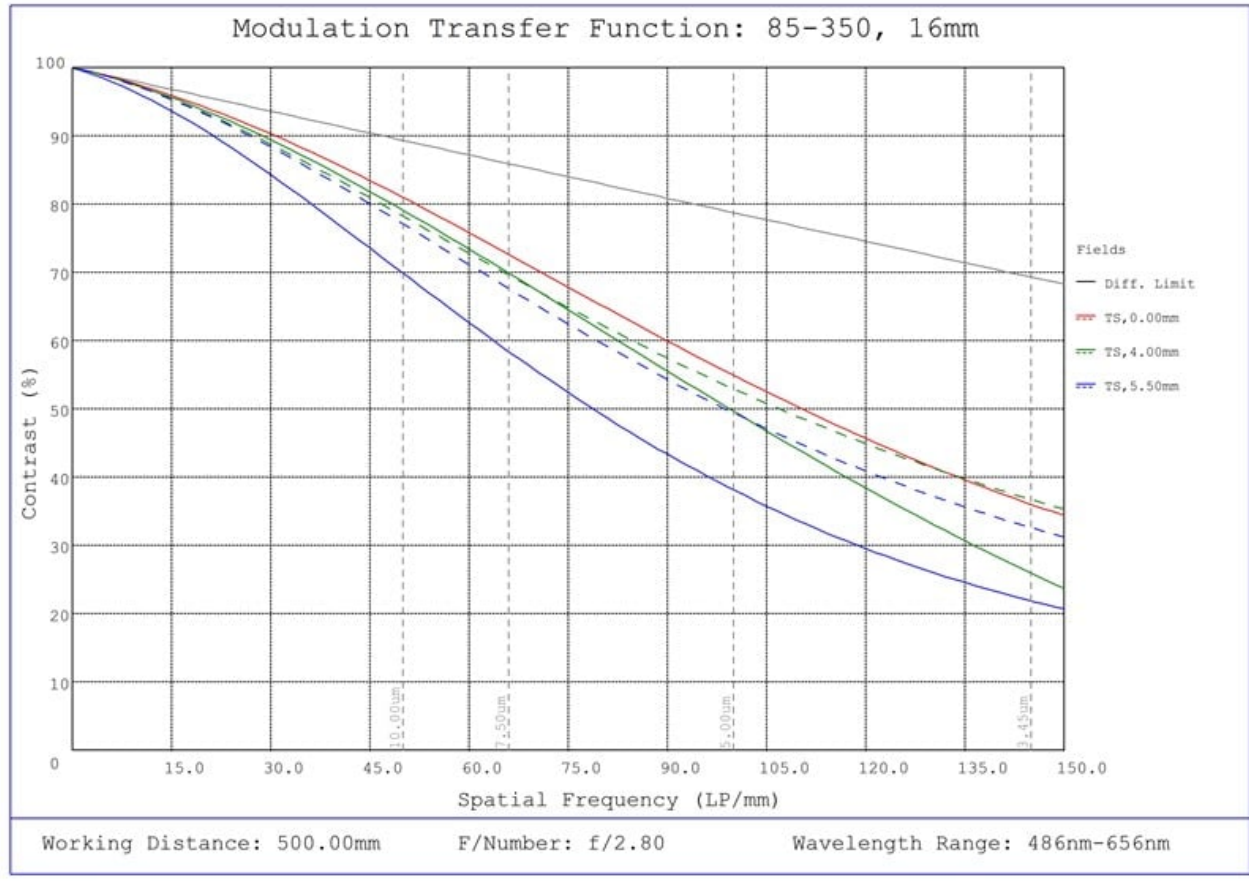
#85-350, 16mm, f/2.8 Ci Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



#85-350, 16mm, f/2.8 Ci Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 200mm Working Distance, f2.8



#85-350, 16mm, f/2.8 Ci Series Fixed Focal Length Lens, Depth of Field Plot, 200mm Working Distance, f2.8



#85-350, 16mm, f/2.8 Ci Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 500mm Working Distance, f2.8



#85-350, 16mm, f/2.8 Ci Series Fixed Focal Length Lens, Depth of Field Plot, 500mm Working Distance, f2.8



January 19, 2025

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>
85-350	16mm, f/2.8 Ci Series Fixed Focal Length Lens

This item is EU RoHS (2015/863/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
January 19, 2025

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



January 19, 2025

<i>Stock No.</i>	<i>Description</i>
85-350	16mm, f/2.8 Ci Series Fixed Focal Length 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



January 19, 2025

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<i>Stock No.</i>	<i>Description</i>
85-350	16mm, f/2.8 Ci Series Fixed Focal Length Lens

This item does not contain any of the substances listed on the Reach SVHC list as of 14 June 2023 in quantities exceeding 0.1% weight by weight.

Please note the following:

- Entry 11 of Annex V of the REACH regulation EC 1907/2006 as amended by regulation 987/2008, exempts "non-hazardous" glass components from registration.
- Items considered to be packing materials and which do not form part of, or are not required for the operation of, the product, are not considered to be within scope of this declaration.
- EO does not routinely analyze products for substances not purposely added or specified within the design specifications, drawings and assembly procedures.

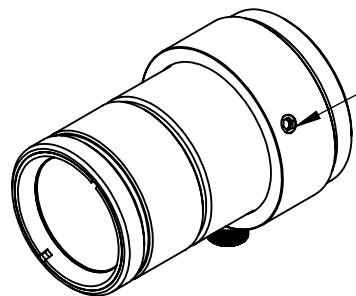
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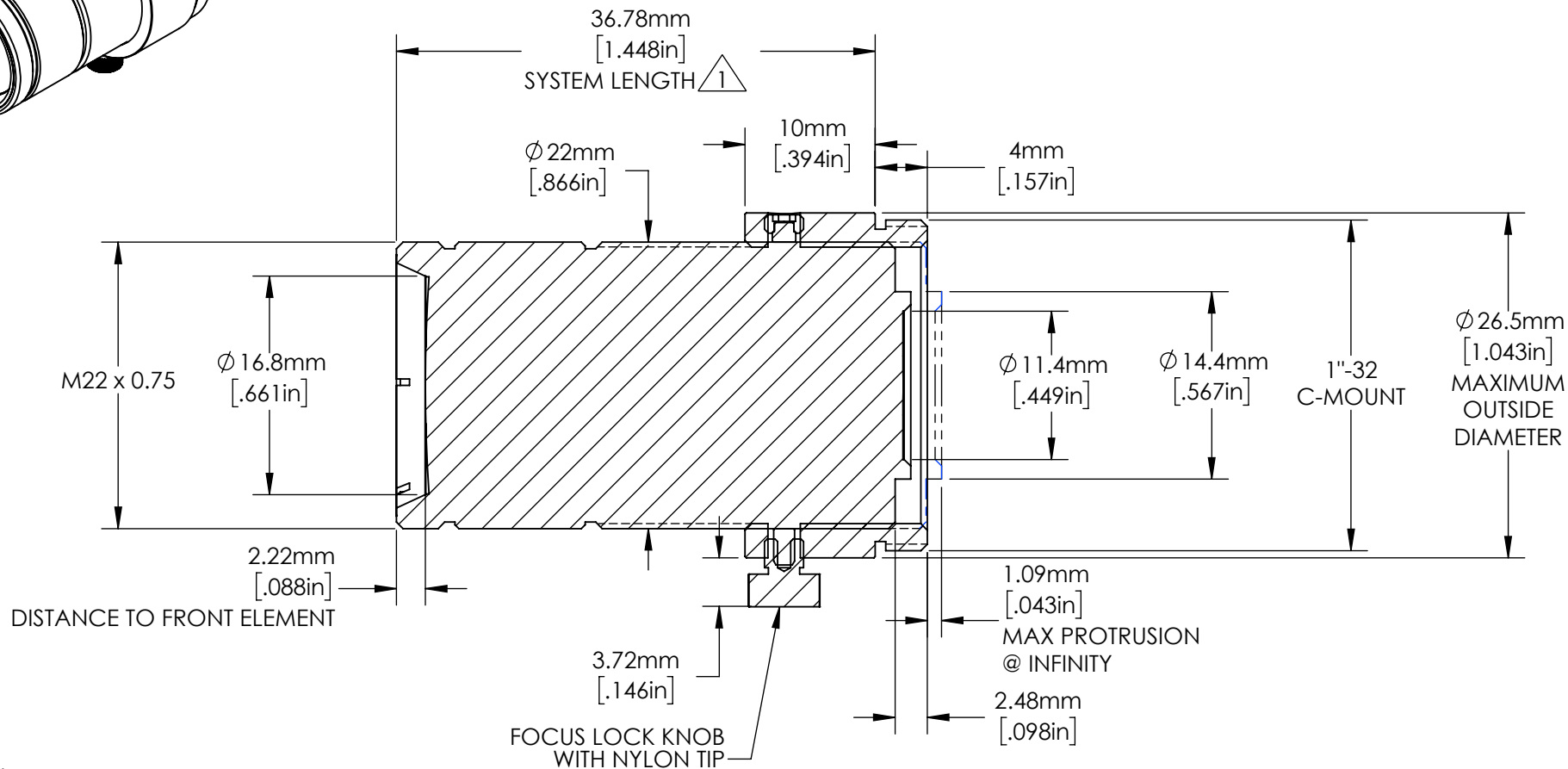


Jay Budd, Director of Corporate Compliance
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(2) M3 SET SCREWS WITH NYLON TIP
FOR OPTIONAL FOCUS LOCKING
@ 120° FROM LOCK KNOB



NOTES:

1. @ 100mm WORKING DISTANCE. MEASURES 34.41mm[1.355in] @ INFINITY.

2. FILTER THREAD: M25.5 x 0.5 WITH REQUIRED ADAPTER #89-941

ALIGNED SECTION VIEW

**FOR INFORMATION ONLY:
DO NOT MANUFACTURE
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®

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DWG NO	85350	
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