

**TECHSPEC® 16mm, f/1.8 Cr Series Fixed Focal Length Lens**

#35-164



16mm Cr Series Fixed Focal Length Lens

해당 제품은 안정성 등급의 강건설계가 적용되어 렌즈의 손상을 방지하고 충격이나 진동에도 광학적 포인팅 및 포지셔닝이 그대로 유지됩니다. 모든 렌즈 요소가 고정 처리되어 있어 이미지 상에서 피사체의 움직임이 줄어듭니다. 해당 제품은 견고하면서도 간소화된 포커싱 및 스테인리스 스틸 고정 C-마운트 클램프 메커니즘이 적용된 것이 특징입니다. 해당 제품은 측정 및 계측, 3D 스테레오 비전, 로봇 공학, 감지, 자율주행 자동차, 객체 추적 등 교정 이미징 시스템에 적합합니다. 피사체에서 이미지로의 매핑(mapping) 역시 강력한 충격이나 진동 후에도 변함없이 유지됩니다. 따라서 피사체의 중심부가 중심 픽셀 위로 매핑될 경우 매핑 지점이 항상 중심 픽셀과 일치합니다.

해당 제품은 [2018 Inspect Award](#)에서 대상을, [2018 Innovators Award](#)에서 은상을 수상했습니다.

참고: 강건설계에 관한 더 자세한 정보는 당사 웹페이지 [강건설계 기술 자료](#)에서 확인할 수 있습니다.

## General

Type: Fixed Focal Length Lens

## Physical & Mechanical Properties

Iris Option:	Fixed
Length (mm):	42.78
Maximum Diameter (mm):	33.8
Weight (g):	67
Maximum Rear Protrusion (mm):	1.09
Diameter (mm):	33.80

## Optical Properties

Horizontal Field of View, 1/2" Sensor:	43.3mm - 22.7°
Horizontal Field of View, 2/3" Sensor:	59.8mm - 30.9°
Horizontal Field of View, 1/3" Sensor:	32.4mm - 17.1°
Maximum Image Circle (mm):	11.00
Numerical Aperture NA, Object Side:	0.0445
Horizontal Field of View @ Max Sensor Format:	59.8mm - 30.9°
Number of Elements (Groups):	7 (6)
Horizontal Field of View, 1/1.8" Sensor:	48.8mm - 25.5°
Horizontal Field of View, 1/2.5" Sensor:	39.2mm - 20.6°
Focal Length FL (mm):	16.00
Primary Magnification PMAG:	0.149
Working Distance (mm):	98 - ∞
Aperture (f/#):	f/1.8
Coating:	425 - 675nm BBAR
Coating Specification:	425 - 675nm BBAR
Entrance Pupil Position (mm):	19.19
Horizontal Field of View, 1/4" Sensor:	24.2mm - 12.9°
Object Space Principal Plane (mm):	21.30
Image Space Principal Plane (mm):	-3.00
Field of View at Max Sensor Format:	Horizontal: 59.7mm - 31° Vertical: 44.6mm - 23.4° Diagonal: 75.1mm - 38.3°
Maximum Distortion (%):	-1.26
Exit Pupil Position (mm):	-5.43
Lens Wavelength Range:	VIS

## Sensor

Maximum Sensor Format: 2/3"

## Threading & Mounting

Filter Thread:	M30.5 x 0.50 (Male)
Filter Thread Adapter:	#89-942 (Required)

Front Thread:

M25.5 x 0.5 (Male)

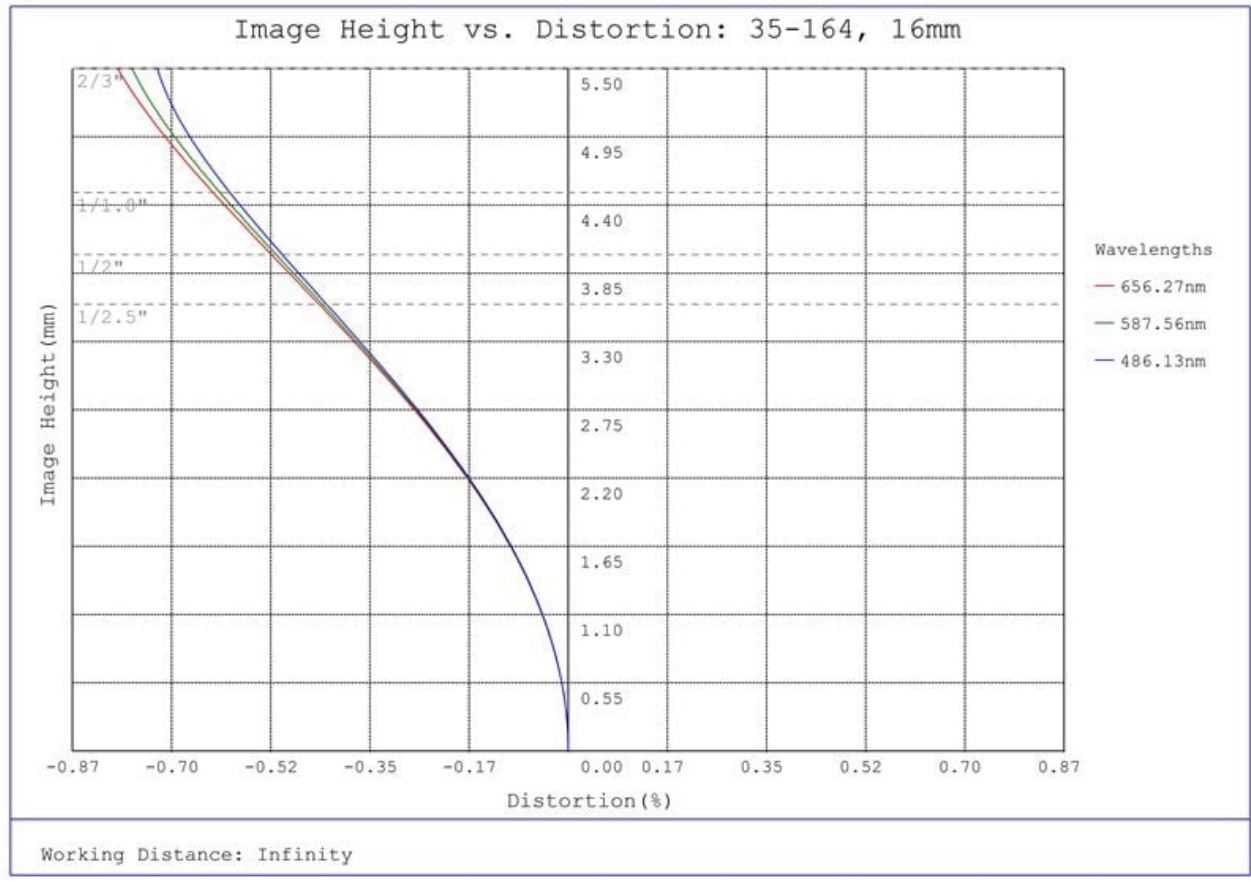
Mount:

C-Mount

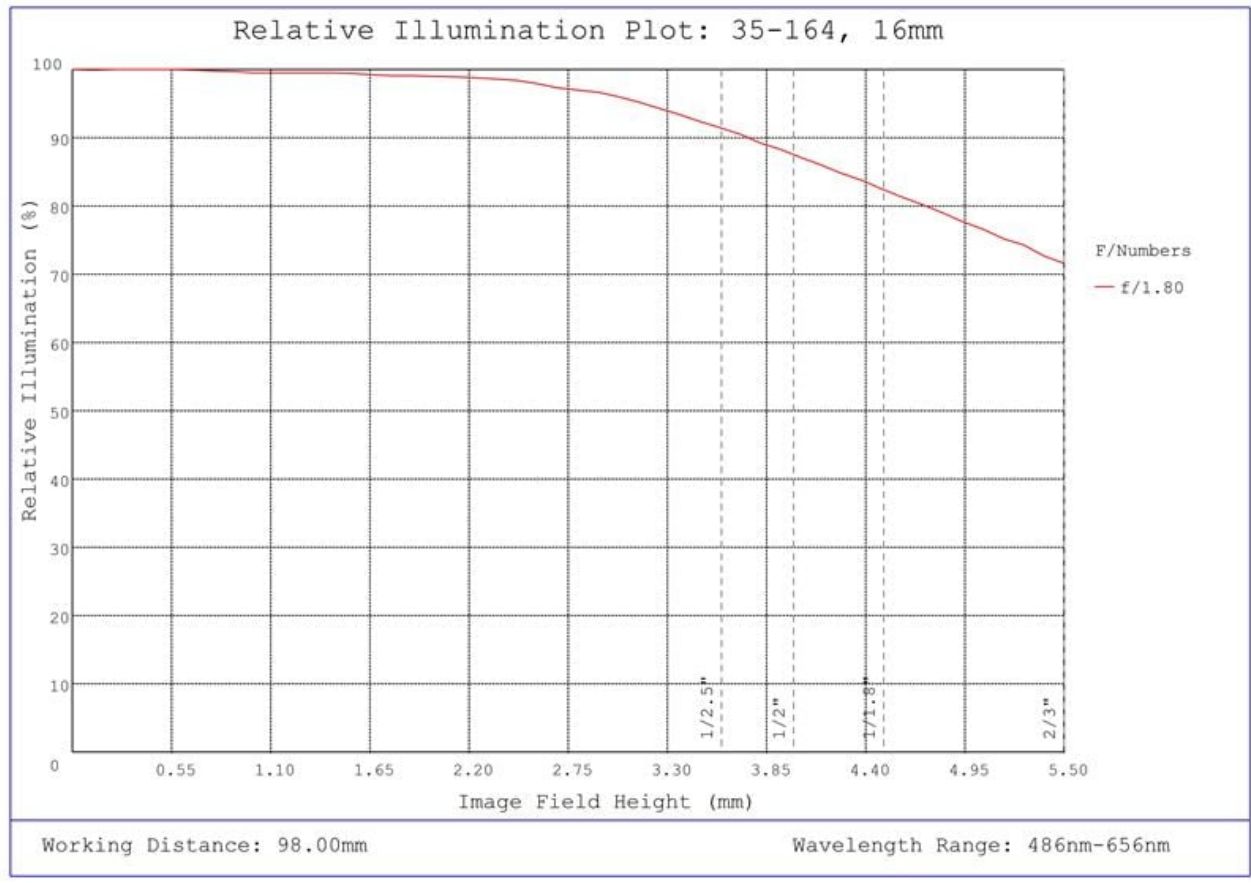
**Environmental & Durability Factors**

Storage Temperature (°C):

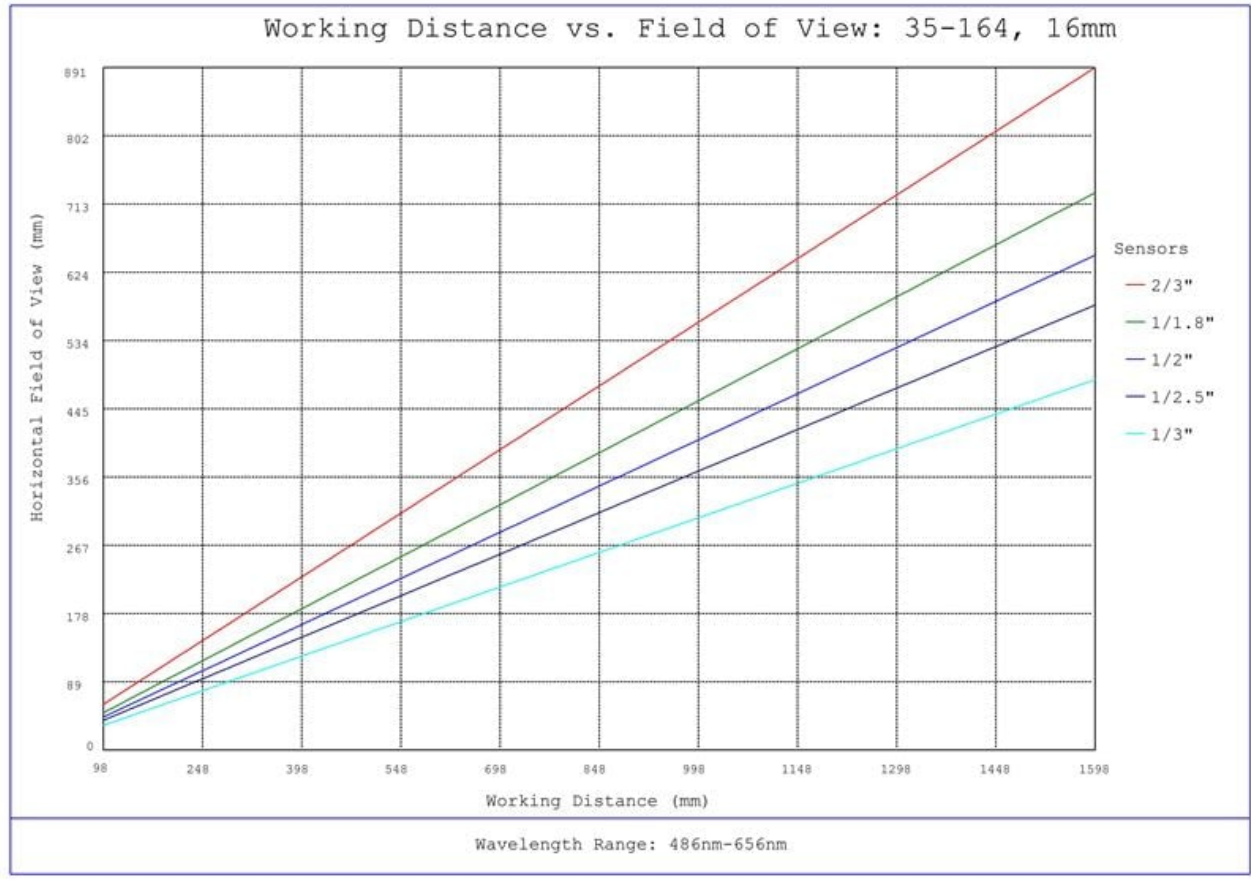
-20 to +60 For questions regarding operating temperature please  
contact our support team



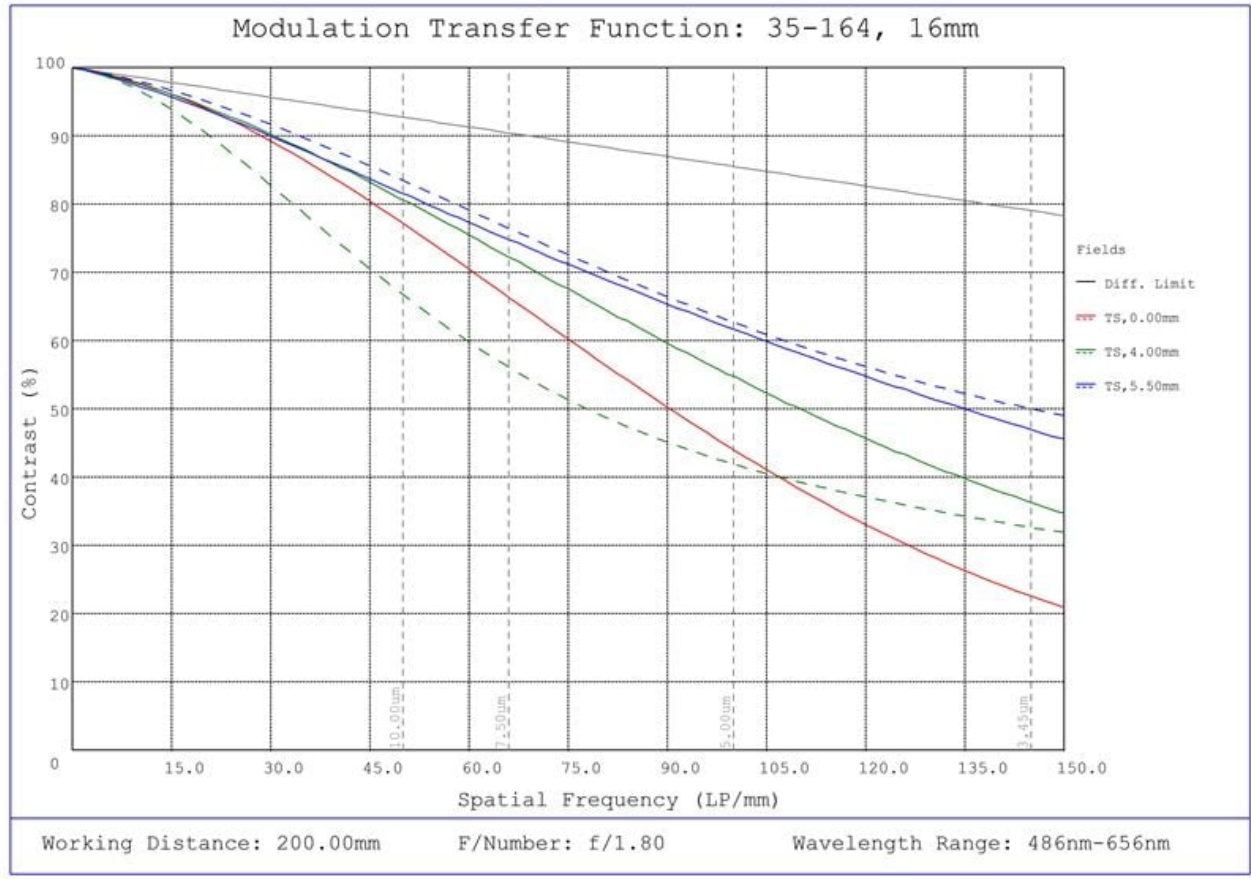
#35-164, 16mm, f/1.8 Cr Series Fixed Focal Length Lens, Distortion Plot



#35-164, 16mm, f/1.8 Cr Series Fixed Focal Length Lens, Relative Illumination Plot



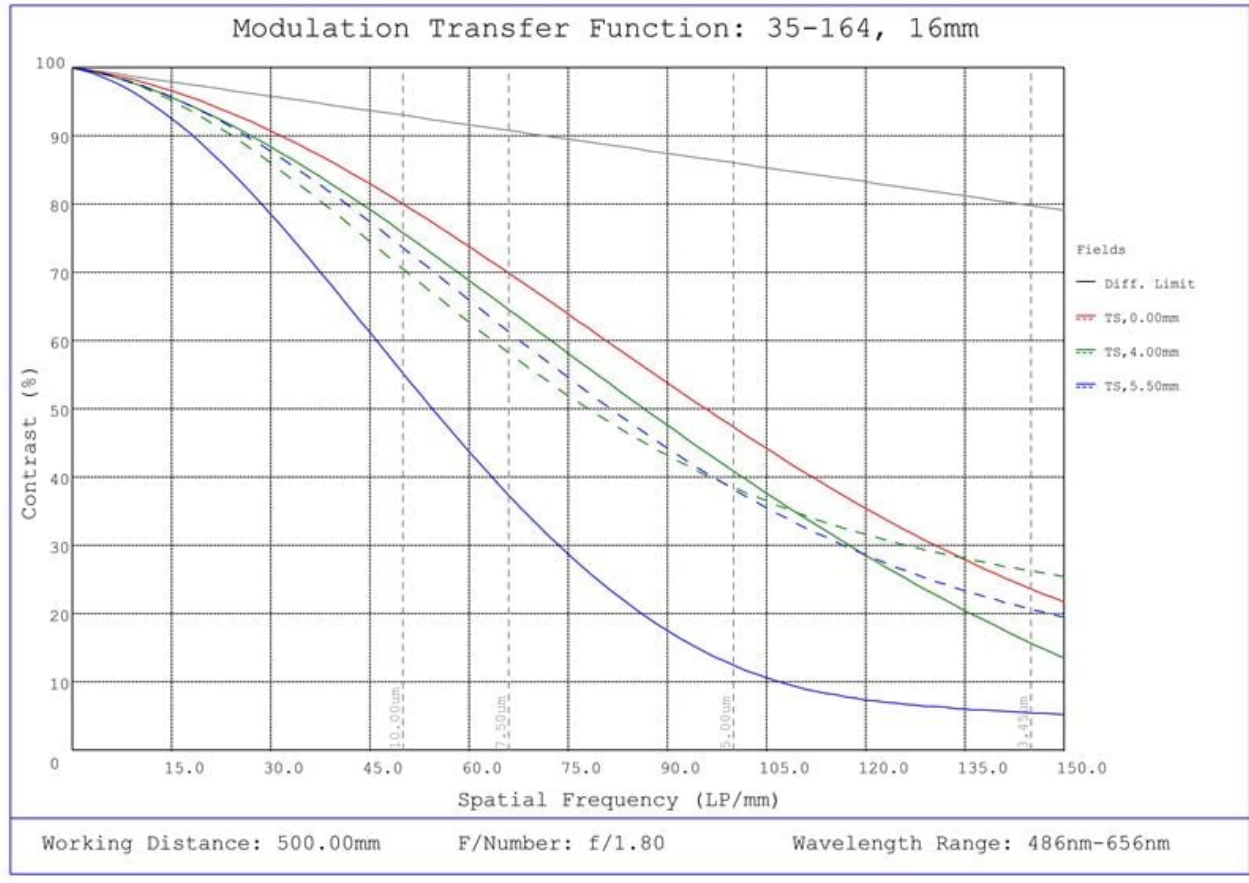
#35-164, 16mm, f/1.8 Cr Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



#35-164, 16mm, f/1.8 Cr Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 200mm Working Distance, f1.8



#35-164, 16mm, f/1.8 Cr Series Fixed Focal Length Lens, Depth of Field Plot, 200mm Working Distance, f1.8



#35-164, 16mm, f/1.8 Cr Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 500mm Working Distance, f1.8



#35-164, 16mm, f/1.8 Cr Series Fixed Focal Length Lens, Depth of Field Plot, 500mm Working Distance, f1.8



June 22, 2025

To Whom It May Concern,

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

재고 번호	제품설명
35-164	16mm, f/1.8 Cr Series Fixed Focal Length 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  
June 22, 2025

Edmund Optics Inc. - 101 E Gloucester Pike, Barrington, NJ 08007 | 1-800-363-1992 | [Compliance@edmundoptics.com](mailto:Compliance@edmundoptics.com)

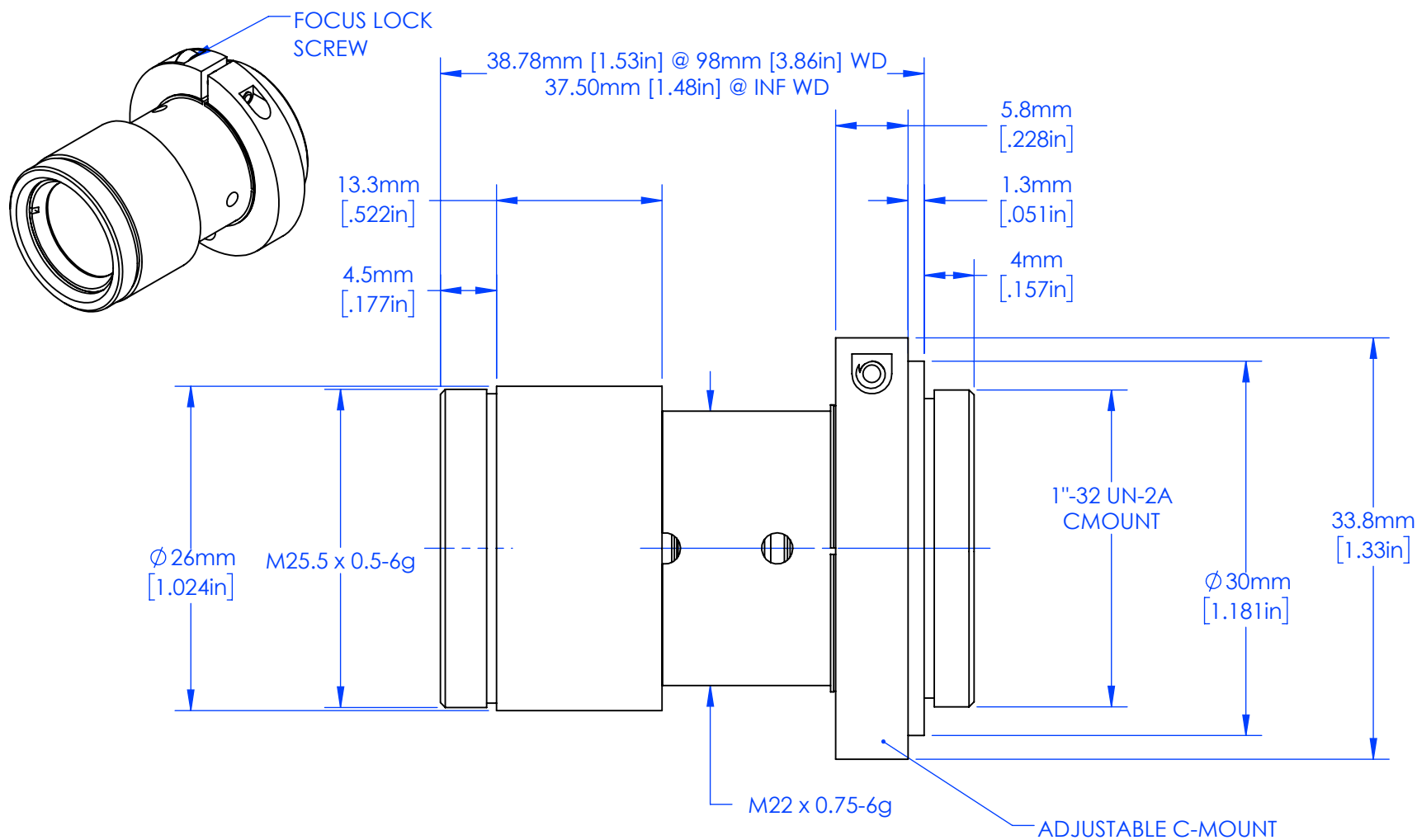
June 22, 2025

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Jeff Harvey- EVP of Operations



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**Edmund Optics®**

TITLE Cr 16mm F/1.8

DWG NO 35164

MATERIAL BLACK ANODIZED  
 ALUMINUM

SHEET  
 1 OF 1