

TECHSPEC® 16mm FL f/4.0 Blue Series IR-Cut M12 Lens

#24-463



TECHSPEC® Blue Series M12 Lenses feature high resolution performance, along with the same great versatility of our [TECHSPEC® Green Series M12 Lenses](#). Each lens consists of several precision glass elements mounted in a compact, aluminum housing. These lenses can connect to C-Mount cameras using the M12 x 0.5 Adapter for C-Mount Cameras ([#53-675](#)) or the M12 x 0.5 C-Mount Adapter with Rubber O-Ring ([#59-241](#)) for vibration-sensitive environments. TECHSPEC® Blue Series M12 Lenses are ideal for automotive, industrial, and medical imaging application. Prescription data is available by submitting a [Request for Prescription Form](#).

Note: Compatible [TECHSPEC® M12 Imaging Lens Accessories](#) available.

General

Type:	M12 Imaging Lens
IR Cut Filter:	Yes

Physical & Mechanical Properties

Iris Option:	Fixed
Length (mm):	22.50
Maximum Diameter (mm):	16

Optical Properties

Horizontal Field of View, 1.2" Sensor:	58.0mm - 22.5°
Horizontal Field of View, 1/3" Sensor:	43.5mm - 17.0°
Maximum Image Circle (mm):	9.00
Numerical Aperture NA, Object Side:	0.017068
Horizontal Field of View @ Max Sensor Format:	25.3°
Number of Elements (Groups):	6 (6)
Horizontal Field of View, 1/1.8" Sensor:	64.9mm - 25.3°
Wavelength Range (nm):	400 - 700
Horizontal Field of View, 1/2.5" Sensor:	52.5mm - 20.5°
Focal Length FL (mm):	16.00
Primary Magnification PMAG:	0.1X
Working Distance (mm):	150 - ∞
Aperture (f/#):	f/4
Distortion (%):	-0.039@ Full Field
Back Focal Length BFL (mm):	10.79 - 10.05
Coating Specification:	λ/4 MgF ₂ @ 588nm
Entrance Pupil Position (mm):	7.5143
Horizontal Field of View, 1/4" Sensor:	32.6mm - 12.8°
Object Space Principal Plane (mm):	7.21
Image Space Principal Plane (mm):	-7.04
Field of View at Max Sensor Format:	Horizontal: 64.9mm - 25.3° Vertical: 48.7mm - 19.1° Diagonal: 81.2mm - 31.4°
Exit Pupil Position (mm):	-6.7445
Lens Wavelength Range:	VIS (IR-Cut Filter)

Sensor

Maximum Sensor Format:	1/1.8"
------------------------	--------

Threading & Mounting

Mount:	M12 x 0.5 (S-Mount)
--------	---------------------



March 03, 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>
24-463	16mm FL f/4.0 Blue Series IR-Cut M12 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
March 03, 2025

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



March 03, 2025

<i>Stock No.</i>	<i>Description</i>
24-463	16mm FL f/4.0 Blue Series IR-Cut M12 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



March 03, 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>
24-463	16mm FL f/4.0 Blue Series IR-Cut M12 Lens

This item does not contain any of the substances listed on the Reach SVHC list as of 27 June 2024 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.

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
March 03, 2025

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