

**TECHSPEC® 12.5mm FL f/4, Blue Series M12 Lens**



12.5mm FL Blue Series M12 Lens



Stock #69-264 **20+ In Stock**

⊖ 1 ⊕ €81<sup>00</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-49	€81,00 each
Qty 50+	€64,00 each
Need More?	<a href="#">Request Quote</a>

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

**General**

Blue Series **Product Family:**

M12 Imaging Lens **Type:**

No **IR Cut Filter:**

High Performance M12 Lens      **Imaging Lens Type:**

## Physical & Mechanical Properties

Fixed      **Iris Option:**

22.90      **Length (mm):**

15      **Maximum Diameter (mm):**

15      **Outer Diameter (mm):**

6      **Weight (g):**

## Optical Properties

**Horizontal Field of View @ Max Sensor Format:**  
28.9°

**Field of View at Max Sensor Format:**  
Horizontal: 78.1mm - 28.9°  
Vertical: 58.5mm - 21.8°  
Diagonal: 97.7mm - 35.7°

**Horizontal Field of View, 1/2" Sensor:**  
78.0mm - 28.8°

**Horizontal Field of View, 1/2.5" Sensor:**  
70.6mm - 26.2°

**Horizontal Field of View, 1/3" Sensor:**  
58.4mm - 21.8°

**Horizontal Field of View, 1/4" Sensor:**  
43.8mm - 16.4°

8.00      **Maximum Image Circle (mm):**

0.0095      **Numerical Aperture NA, Object Side:**

5(5)      **Number of Elements (Groups):**

400 - 700      **Wavelength Range (nm):**

12.50      **Focal Length FL (mm):**

150 - ∞      **Working Distance (mm):**

f/4      **Aperture (f/#):**

-0.36 @ Full Field      **Distortion (%):**

10.1 - 9.7      **Back Focal Length BFL (mm):**

M4 MgF<sub>2</sub> @ 550nm      **Coating Specification:**

10.87      **Entrance Pupil Position (mm):**

10.14      **Object Space Principal Plane (mm):**

-3.01      **Image Space Principal Plane (mm):**

-0.36      **Maximum Distortion (%):**

-2.33      **Exit Pupil Position (mm):**

VS      **Lens Wavelength Range:**

## Sensor

1/2"      **Maximum Sensor Format:**

1.40      **Pixel Size (μm):**

## Threading & Mounting

N/A      **Filter Thread:**

S-Mount (M12 x 0.5)      **Mount:**

## Regulatory Compliance

Compliant

RoHS 2015:

[View](#)

Certificate of Conformance:

Compliant

Reach 247:

## Product Details

- Up to 1/2", S-Mount Lens
- Up to 5 MegaPixels, 1.4µm Pixel Size Sensors
- High Resolution Board Camera Lens Optimized for Close WD
- 2mm to 35mm Focal Length
- **Ruggedized Designs** Also Available

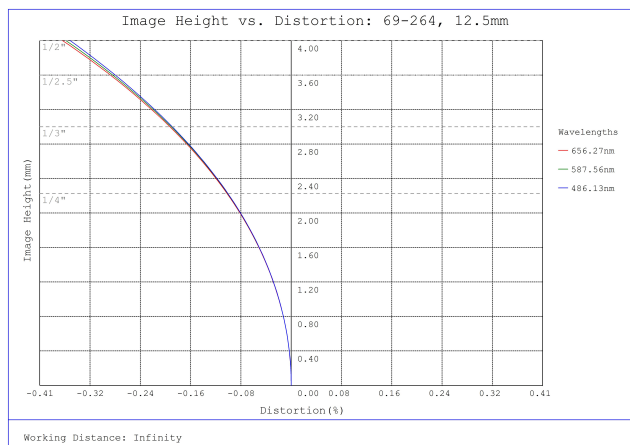
TECHSPEC® Blue Series M12 Lenses feature high resolution performance, along with the same great versatility of our [TECHSPEC® Green Series M12 Lenses](#). Each lens consists of several precision glass elements mounted in a compact, aluminum housing. These lenses can connect to C-Mount cameras using the M12 x0.5 Adapter for C-Mount Cameras ([#53-675](#)) or the M12 x0.5 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.

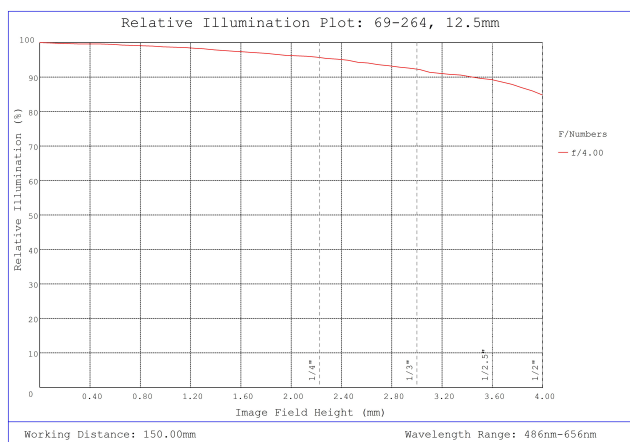
Edmund Optics has created multiple product families of our TECHSPEC® M12 S-Mount Lenses, which are designed to provide high resolution. These high performance lenses feature precision glass designs in a metal housing and have optimized specifications between each product family to meet your application needs.

- Blue Series M12 Lenses: High resolution finite conjugate designs optimized for machine vision working distances.
- **Rugged Blue Series M12 Lenses:** **Stabilized ruggedization** versions of our Blue Series M12 Lenses, utilizing the same optics.
- **Green Series M12 Lenses:** Finite conjugate designs optimized for machine vision working distances.
- **Red Series M12 Lenses:** Infinite conjugate designs optimized for high resolution performance out to infinity.
- **HEO Series M12 Lenses:** Harsh Environment Optics (HEO) sealed versions of our Red Series M12 Lenses.
- **Liquid Lens M12 Lenses:** Integrated liquid lens for fast electronic focus.

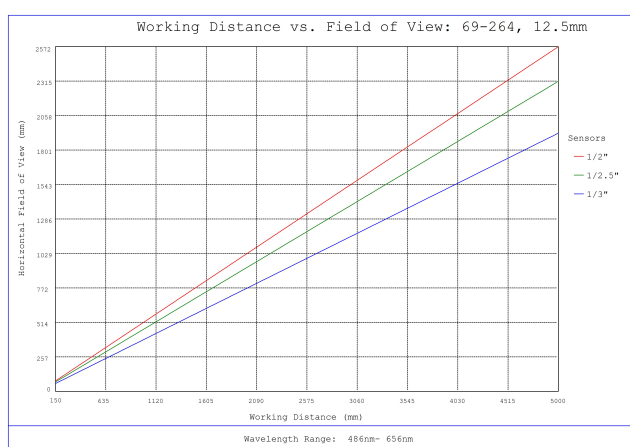
## Technical Information



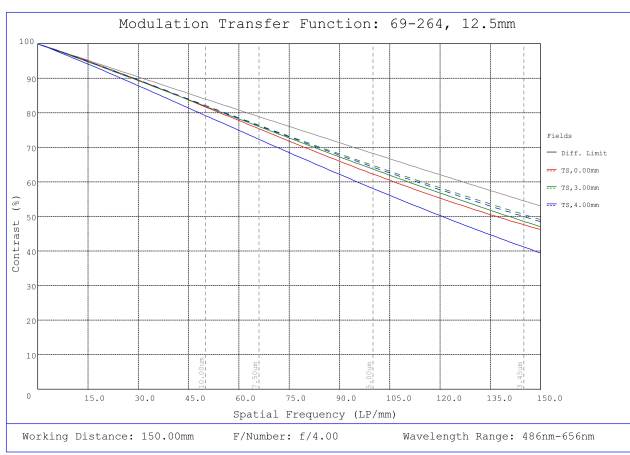
#69-264, 12.5mm FL f/4, Blue Series M12 Lens, Distortion Plot



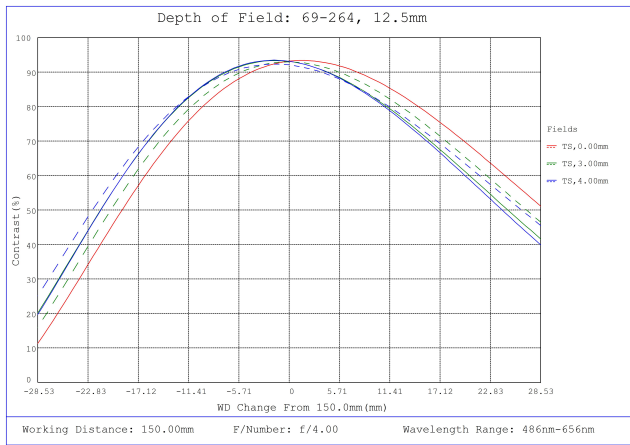
#69-264, 12.5mm FL f/4, Blue Series M12 Lens, Relative Illumination Plot



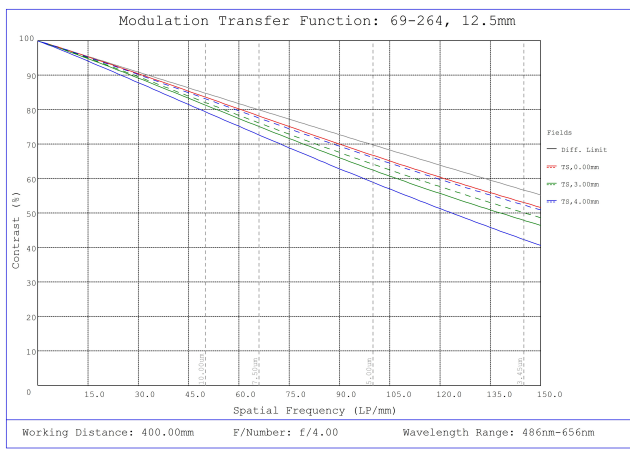
#69-264, 12.5mm FL f/4, Blue Series M12 Lens, Working Distance versus Field of View Plot



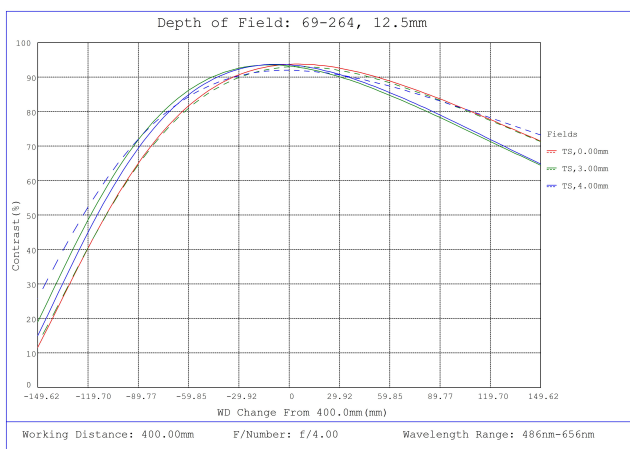
#69-264, 12.5mm FL f/4, Blue Series M12 Lens, Modulated Transfer Function (MTF) Plot, 150mm Working Distance, f4



#69-264, 12.5mm FL f/4, Blue Series M12 Lens, Depth of Field Plot, 150mm Working Distance, f4



#69-264, 12.5mm FL f/4, Blue Series M12 Lens, Modulated Transfer Function (MTF) Plot, 400mm Working Distance, f4



#69-264, 12.5mm FL f/4, Blue Series M12 Lens, Depth of Field Plot, 400mm Working Distance, f4

Focal Length	A	B	C*	D
2.0mm	18.0mm	21.7mm	2.26mm	4.75mm
3.0mm	14.0mm	17.1mm	4.8 - 4.7mm	5.8mm
4.0mm	14.0mm	19.7mm	6.1 - 6.0mm	4.4mm
5.0mm	14.0mm	14.6mm	4.0 - 3.9mm	3.7mm
6.0mm	14.0mm	14.1mm	6.9 - 6.8mm	4.5mm
8.0mm	14.0mm	12.3mm	8.8 - 8.6mm	3.7mm
10.0mm	14.0mm	17.0mm	6.6 - 6.3mm	3.7mm

12.5mm	15.0mm	22.9mm	10.1 - 9.7mm	4.8mm
17.5mm	14.0mm	20.7mm	5.8 - 4.9mm	7.6mm
25.0mm	18.0mm	30.0mm	8.5 - 6.5mm	11.5mm
35.0mm	18.0mm	29.5mm	18.72 - 14.0mm	14.5mm
□				

\*Specified for Optimized Working Distance of 150 - 250mm.

;