

**TECHSPEC® 10mm FL f/4, Blue Series IR-Cut M12 Lens**



Stock #24-455 **6 In Stock**

⊖ 1 ⊕ €80<sup>00</sup>

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| Qty 1-49       | €80,00 each                   |
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**General**

Blue Series **Product Family:**

M12 Imaging Lens **Type:**

Yes **IR Cut Filter:**

IR-Cut Filter      Special Type of Lens:

## Physical & Mechanical Properties

Fixed      Iris Option:

17.00      Length (mm):

14      Maximum Diameter (mm):

14      Outer Diameter (mm):

5      Weight (g):

## Optical Properties

Horizontal Field of View @ Max Sensor Format:  
27.1°

Field of View at Max Sensor Format:  
Horizontal: 71.8mm - 27.1°  
Vertical: 53.8mm - 20.5°  
Diagonal: 89.9mm - 33.6°

Horizontal Field of View, 1/3" Sensor:  
71.8mm - 27.1°

Horizontal Field of View, 1/4" Sensor:  
53.8mm - 20.5°

6.00      Maximum Image Circle (mm):

0.0079      Numerical Aperture NA, Object Side:

5(4)      Number of Elements (Groups):

400 - 700      Wavelength Range (nm):

10.00      Focal Length FL (mm):

150 - ∞      Working Distance (mm):

f/4      Aperture (f#):

-0.25 @ Full Field      Distortion (%):

6.6 - 6.3      Back Focal Length BFL (mm):

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

8.45      Entrance Pupil Position (mm):

8.24      Object Space Principal Plane (mm):

-3.29      Image Space Principal Plane (mm):

-0.25      Maximum Distortion (%):

-3.08      Exit Pupil Position (mm):

VS (IR-Cut Filter)      Lens Wavelength Range:

## Sensor

1/3"      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:

## 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

| 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.