

TECHSPEC<sup>®</sup> 16mm FL f/5.6 Blue Series IR-Cut M12 Lens



Stock **#24-464** **3 In Stock**

-

1

+

£66<sup>00</sup>

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| Volume Pricing |                               |
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| Qty 1-49       | £66.00 each                   |
| Qty 50+        | £53.00 each                   |
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 Prices shown are exclusive of VAT/local taxes

Product Downloads

SPECIFICATIONS

General

Blue Series

Series:

|                  |                       |
|------------------|-----------------------|
| M12 Imaging Lens | Type:                 |
| Yes              | IR Cut Filter:        |
| IR-Cut Filter    | Special Type of Lens: |

Physical & Mechanical Properties

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

Optical Properties

|                                                                                                                           |  |
|---------------------------------------------------------------------------------------------------------------------------|--|
| Horizontal Field of View @ Max Sensor Format:<br>25.3°                                                                    |  |
| Field of View at Max Sensor Format:<br>Horizontal: 64.9mm - 25.3°<br>Vertical: 48.7mm - 19.1°<br>Diagonal: 81.2mm - 31.4° |  |
| Horizontal Field of View, 1.2" Sensor:<br>58.0mm - 22.5°                                                                  |  |
| Horizontal Field of View, 1/1.8" Sensor:<br>64.9mm - 25.3°                                                                |  |
| Horizontal Field of View, 1/2.5" Sensor:<br>52.5mm - 20.5°                                                                |  |
| Horizontal Field of View, 1/3" Sensor:<br>43.5mm - 17.0°                                                                  |  |
| Horizontal Field of View, 1/4" Sensor:<br>32.6mm - 12.8°                                                                  |  |
| Maximum Image Circle (mm):<br>9.00                                                                                        |  |
| Numerical Aperture NA, Object Side:<br>0.011948                                                                           |  |
| Number of Elements (Groups):<br>6 (6)                                                                                     |  |
| Wavelength Range (nm):<br>400 - 700                                                                                       |  |
| Focal Length FL (mm):<br>16.00                                                                                            |  |
| Working Distance (mm):<br>150 - ∞                                                                                         |  |
| Aperture (f/#):<br>f/5.6                                                                                                  |  |
| Distortion (%):<br>-0.039@ Full Field                                                                                     |  |
| Back Focal Length BFL (mm):<br>10.79 - 10.05                                                                              |  |
| Coating Specification:<br>λ/4 MgF <sub>2</sub> @ 588nm                                                                    |  |
| Entrance Pupil Position (mm):<br>7.5143                                                                                   |  |
| Object Space Principal Plane (mm):<br>7.21                                                                                |  |
| Image Space Principal Plane (mm):<br>-7.04                                                                                |  |
| Maximum Distortion (%):<br>-0.039                                                                                         |  |
| Exit Pupil Position (mm):<br>-6.7445                                                                                      |  |
| Lens Wavelength Range:<br>VS (IR-Cut Filter)                                                                              |  |

Sensor

|        |                        |
|--------|------------------------|
| 1/1.8" | 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 ½", 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 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.

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.