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TECHSPEC 8mm FL f/4, Rugged Blue Series IR-Cut M12 Lens



TECHSPEC® Rugged Blue Series M12 Lenses



Stock #25-058 20+ In Stock

- 1 + A\$170°

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Qty 1+	A\$170.00 each
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SPECIFICATIONS

General

Rugged Blue Series

Series:

Type:

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M12 Imaging Lens
                                    IR Cut Filter:
 Yes
                           Special Type of Lens:
 IR-Cut Filter
Physical & Mechanical Properties
                                     Iris Option:
 Fixed
                                   Length (mm):
 12.30
                       Maximum Diameter (mm):
 14
                           Outer Diameter (mm):
 14
                                     Weight (g):
 3
Optical Properties
    Horizontal Field of View @ Max Sensor Format:
 94.0mm - 34.2°
              Field of View at Max Sensor Format:
 Horizontal: 92.8mm - 34.2°
 Vertical: 68.9mm - 25.7°
 Diagonal: 117.5mm - 42.6°
             Horizontal Field of View, 1/3" Sensor:
 94.0mm - 34.2°
             Horizontal Field of View, 1/4" Sensor:
 69.8mm - 25.7°
                    Maximum Image Circle (mm):
 6.00
              Numerical Aperture NA, Object Side:
 0.0064
                   Number of Elements (Groups):
 5(5)
                        Wavelength Range (nm):
 400 - 700
                           Focal Length FL (mm):
 8.00
                         Working Distance (mm):
 150 - ∞
                                  Aperture (f/#):
 f/4
                                  Distortion (%):
 -3.63 @ Full Field
                     Back Focal Length BFL (mm):
 8.8 - 8.6
                           Coating Specification:
 λ/4 MgF<sub>2</sub> @ 550nm
                    Entrance Pupil Position (mm):
 5.04
              Object Space Principal Plane (mm):
 8.13
               Image Space Principal Plane (mm):
 0.94
                         Maximum Distortion (%):
 -3.63
                         Exit Pupil Position (mm):
 -4.09
                        Lens Wavelength Range:
 MS
Sensor
                       Maximum Sensor Format:
 1/3"
                                 Pixel Size (µm):
 1.40
Threading & Mounting
                                   Filter Thread:
 N/A
                                         Mount:
 S-Mount (M12 \times 0.5)
Environmental & Durability Factors
```

Stabilized (Robust Mechanics for Shock and Vibration)

Regulatory Compliance

Certificate of Conformance:

View

PRODUCT DETAILS

- Up to 1/2", S-Mount Lens
- Up to 5 MegaPixels, 1.4µm Pixel Size Sensors
- Ruggedized Designs (50g Shock) of our Blue Series Lens with Individual Optics Glued in Place
- 2mm to 25mm Focal Length
- Non-Ruggedized Designs Also Available

TECHSPEC® Rugged Blue Series M12 Lenses have stabilized ruggedization, protecting the lens from damage, while reducing pixel shift and maintaining optical pointing stability after shock and vibration. Each lens consists of several precision glass optics that are glued in place inside a compact, aluminum housing. Gluing the glass optics prevents even the smallest movements that often cause pixel shift. Object to image mapping is maintained even after heavy shock and vibration; if the center of the object maps onto the center pixel, it will always map to that same center pixel. TECHSPEC Rugged Blue Series M12 Lenses are ideal for calibrated imaging applications such as measurement and gauging, 3D stereo vision, robotics and sensing, autonomous vehicles, and object tracking. These lenses are available in a variety of f/# options ranging from f/2.5 to f/8.

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

