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TECHSPEC® 17.5mm FL f/4, Blue Series IR-Cut M12 Lens



Stock #24-467 **20+ In Stock**

⊖ 1 ⊕ C\$161⁰⁰

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| Qty 1-49 | C\$161.00 each |
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General

Blue Series **Product Family:**
M12 Imaging Lens **Type:**
Yes **IR Cut Filter:**
Special Type of Lens:

Physical & Mechanical Properties

| | |
|-------|-------------------------------|
| Fixed | Iris Option: |
| 20.70 | Length (mm): |
| 14 | Maximum Diameter (mm): |
| 14 | Outer Diameter (mm): |
| 7 | Weight (g): |

Optical Properties

Horizontal Field of View @ Max Sensor Format:
23.1°

Field of View at Max Sensor Format:
Horizontal: 57.0mm - 23.1°
Vertical: 38mm - 15.6°
Diagonal: 63.3mm - 25.6°

Horizontal Field of View, 1.2" Sensor:
50.7mm - 20.6°

Horizontal Field of View, 1/1.8" Sensor:
57.0mm - 23.1°

Horizontal Field of View, 1/2.5" Sensor:
45.9mm - 18.7°

Horizontal Field of View, 1/3" Sensor:
38.0mm - 15.6°

Horizontal Field of View, 1/4" Sensor:
28.5mm - 11.7°

Maximum Image Circle (mm):
9.00

Numerical Aperture NA, Object Side:
0.0134

Number of Elements (Groups):
6(5)

Wavelength Range (nm):
400 - 700

Focal Length FL (mm):
17.50

Working Distance (mm):
150 - ∞

Aperture (f/#):
f/4

Distortion (%):
0.76 @ Full Field

Back Focal Length BFL (mm):
5.8 - 4.9

Coating Specification:
M4 MgF₂ @ 550nm

Entrance Pupil Position (mm):
13.01

Object Space Principal Plane (mm):
5.57

Image Space Principal Plane (mm):
-12.71

Maximum Distortion (%):
-0.76

Exit Pupil Position (mm):
-7.49

Lens Wavelength Range:
VIS (IR-Cut Filter)

Sensor

Maximum Sensor Format:
1/1.8"

Pixel Size (µm):
1.40

Threading & Mounting

Filter Thread:
N/A

Mount:
S-Mount (M12 x 0.5)

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

| 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.

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