

TECHSPEC® 8mm FL f/2.5, Blue Series M12 Lens



8mm Blue Series M12 Lens



Stock #58-203 **20+ In Stock**

- 1 + A\$137.⁰⁰

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| Volume Pricing | |
|----------------|-------------------------------|
| Qty 1-49 | A\$137.00 each |
| Qty 50+ | A\$108.00 each |
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Product Downloads

General

Blue Series **Product Family:**

M12 Imaging Lens **Type:**

No **IR Cut Filter:**

Imaging Lens Type:
High Performance M12 Lens

Physical & Mechanical Properties

Fixed Iris Option:
12.30 Length (mm):
14 Maximum Diameter (mm):
14 Outer Diameter (mm):
3 Weight (g):

Optical Properties

Horizontal Field of View @ Max Sensor Format:
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°

6.00 Maximum Image Circle (mm):

0.0103 Numerical Aperture NA, Object Side:

5(5) Number of Elements (Groups):

400 - 700 Wavelength Range (nm):

8.00 Focal Length FL (mm):

150 - ∞ Working Distance (mm):

f/2.5 Aperture (f#):

-3.63 @ Full Field Distortion (%):

8.8 - 8.6 Back Focal Length BFL (mm):

M4 MgF₂ @ 550nm Coating Specification:

5.04 Entrance Pupil Position (mm):

8.13 Object Space Principal Plane (mm):

0.94 Image Space Principal Plane (mm):

-3.63 Maximum Distortion (%):

-4.09 Exit Pupil Position (mm):

VS 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

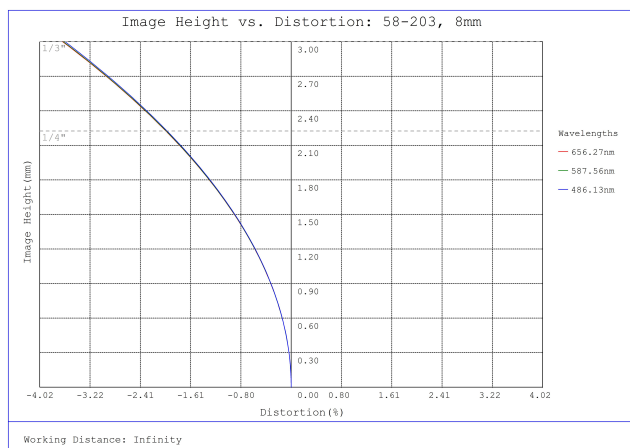
TECHSPEC® Blue Series M12 Lenses feature high resolution performance, along with the same great versatility of our [TECHSPEC® Green Series M12 Lenses](#). Each lens consists of several precision glass elements mounted in a compact, aluminum housing. These lenses can connect to C-Mount cameras using the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

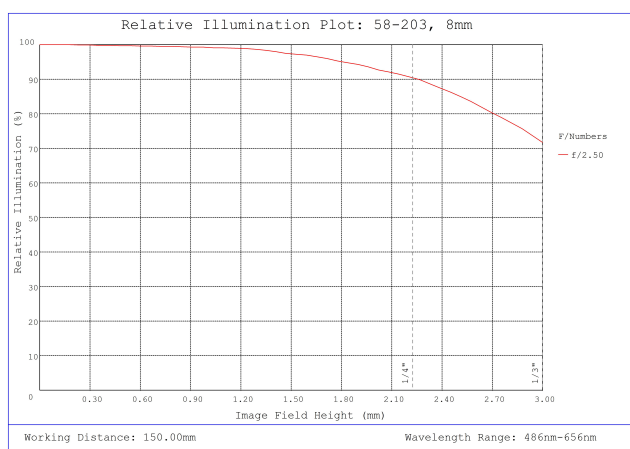
Edmund Optics has created multiple product families of our TECHSPEC® M12 S-Mount Lenses, which are designed to provide high resolution. These high performance lenses feature precision glass designs in a metal housing and have optimized specifications between each product family to meet your application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

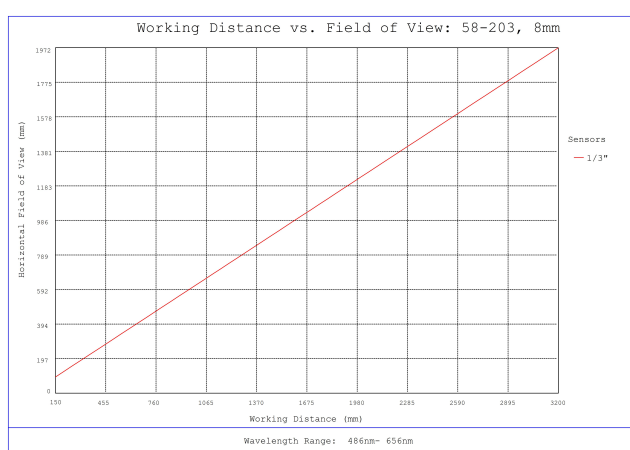
Technical Information



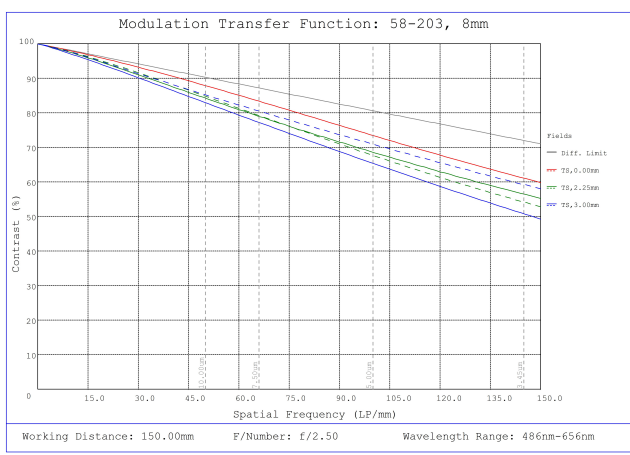
#58-203, 8mm FL f/2.5, Blue Series M12 Lens, Distortion Plot



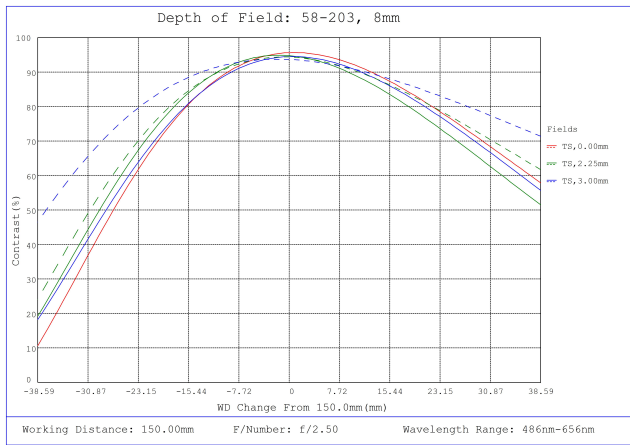
#58-203, 8mm FL f/2.5, Blue Series M12 Lens, Relative Illumination Plot



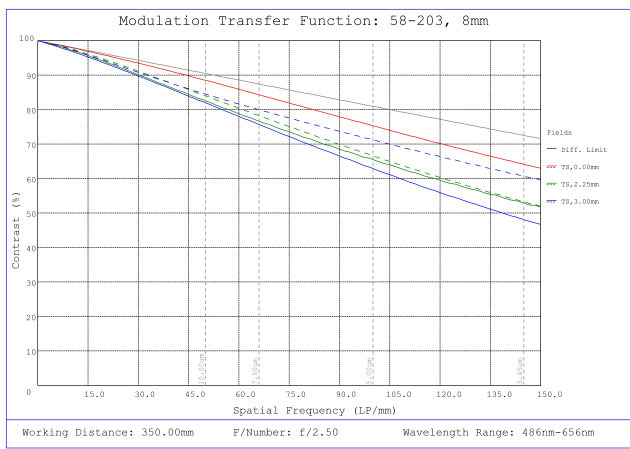
#58-203, 8mm FL f/2.5, Blue Series M12 Lens, Working Distance versus Field of View Plot



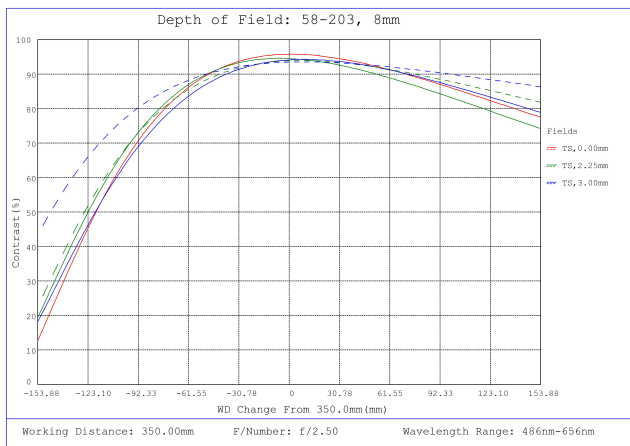
#58-203, 8mm FL f/2.5, Blue Series M12 Lens, Modulated Transfer Function (MTF) Plot, 150mm Working Distance, f2.5



#58-203, 8mm FL f/2.5, Blue Series M12 Lens, Depth of Field Plot, 150mm Working Distance, f2.5



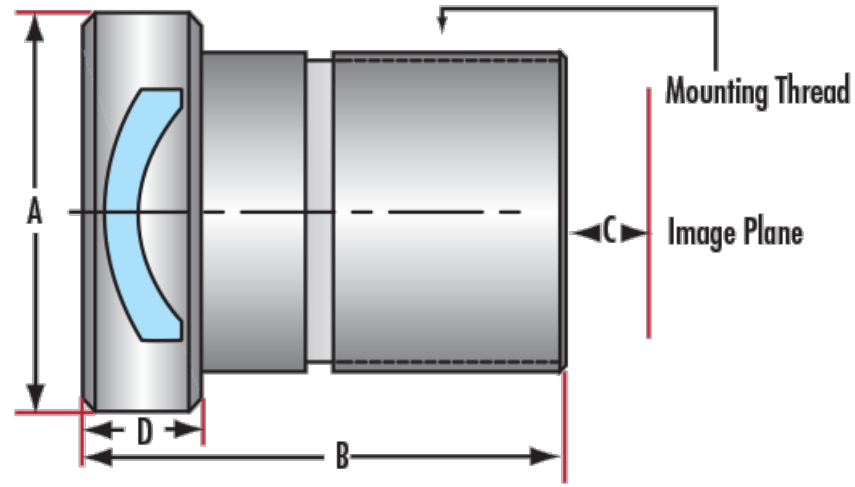
#58-203, 8mm FL f/2.5, Blue Series M12 Lens, Modulated Transfer Function (MTF) Plot, 350mm Working Distance, f2.5



#58-203, 8mm FL f/2.5, Blue Series M12 Lens, Depth of Field Plot, 350mm Working Distance, f2.5

| 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.