

TECHSPEC<sup>®</sup> f/2.5, Visible, 8.0mm HEO Series M12 Lens



8.0mm Focal Length

Stock **#63-759** [CONTACT US](#)

-

1

+

€159<sup>00</sup>

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-49       | €159,00 each                  |
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 Prices shown are exclusive of VAT/local taxes

Product Downloads

SPECIFICATIONS

General

HEO Series

Series:

M12 Imaging Lens

Type:

|                                                                                                                              |                                     |
|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| No                                                                                                                           | IR Cut Filter:                      |
| Meets IEC IPX7 and IPX9K                                                                                                     | Imaging Lens Type:                  |
| Physical & Mechanical Properties                                                                                             |                                     |
| Fixed                                                                                                                        | Iris Option:                        |
| 15.00                                                                                                                        | Length (mm):                        |
| 14                                                                                                                           | Maximum Diameter (mm):              |
| 14                                                                                                                           | Outer Diameter (mm):                |
| 4                                                                                                                            | Weight (g):                         |
| Optical Properties                                                                                                           |                                     |
| Horizontal Field of View @ Max Sensor Format:<br>390.7mm - 51.9°                                                             |                                     |
| Field of View at Max Sensor Format:<br>Horizontal: 390.7mm - 51.9°<br>Vertical: 249.7mm - 34.5°<br>Diagonal: 442.8mm - 57.8° |                                     |
| Horizontal Field of View, 1/1.7" Sensor:<br>390.7mm - 51.9°                                                                  |                                     |
| Horizontal Field of View, 1/2" Sensor:<br>341.7mm - 46.1°                                                                    |                                     |
| Horizontal Field of View, 1/2.5" Sensor:<br>306.3mm - 41.8°                                                                  |                                     |
| Horizontal Field of View, 1/3" Sensor:<br>249.6mm - 34.5°                                                                    |                                     |
| Horizontal Field of View, 1/4" Sensor:<br>184.6mm - 25.9°                                                                    |                                     |
| 10.00                                                                                                                        | Maximum Image Circle (mm):          |
| 0.0039                                                                                                                       | Numerical Aperture NA, Object Side: |
| 145 lp/mm @ 20% Contrast                                                                                                     | Resolution, On-Axis:                |
| 6 (5)                                                                                                                        | Number of Elements (Groups):        |
| 425 - 675                                                                                                                    | Wavelength Range (nm):              |
| 8.00                                                                                                                         | Focal Length FL (mm):               |
| 400 - ∞                                                                                                                      | Working Distance (mm):              |
| f/2.5                                                                                                                        | Aperture (f/#):                     |
| -9.15 @ Full Field                                                                                                           | Distortion (%):                     |
| 8.67 - 8.53                                                                                                                  | Back Focal Length BFL (mm):         |
| 425 - 625nm BBAR                                                                                                             | Coating Specification:              |
| 3.67                                                                                                                         | Entrance Pupil Position (mm):       |
| 7.82                                                                                                                         | Object Space Principal Plane (mm):  |
| 0.97                                                                                                                         | Image Space Principal Plane (mm):   |
| -9.15                                                                                                                        | Maximum Distortion (%):             |
| -7.65                                                                                                                        | Exit Pupil Position (mm):           |
| VS                                                                                                                           | Lens Wavelength Range:              |
| Sensor                                                                                                                       |                                     |
| 1/1.7"                                                                                                                       | Maximum Sensor Format:              |
| 5.00                                                                                                                         | Pixel Size (μm):                    |
|                                                                                                                              |                                     |

Threading & Mounting

|                    |                |
|--------------------|----------------|
| N/A                | Filter Thread: |
| S-Mount (M12 x0.5) | Mount:         |

Environmental & Durability Factors

|                             |                        |
|-----------------------------|------------------------|
| IPX7 and IPX9K              | Environmental Rating:  |
| Waterproof (IPX7 and IPX9K) | Type of Ruggedization: |

Regulatory Compliance

|                      |                             |
|----------------------|-----------------------------|
| <a href="#">View</a> | Certificate of Conformance: |
|----------------------|-----------------------------|

PRODUCT DETAILS

- Up to 1/2", S-Mount Lens
- Up to 1.2 MegaPixels, 5µm Pixel Size Sensors
- Meets IEC Ingress Protection Ratings of IPX7 and IPX9K
- 2.2mm to 8mm Focal Length

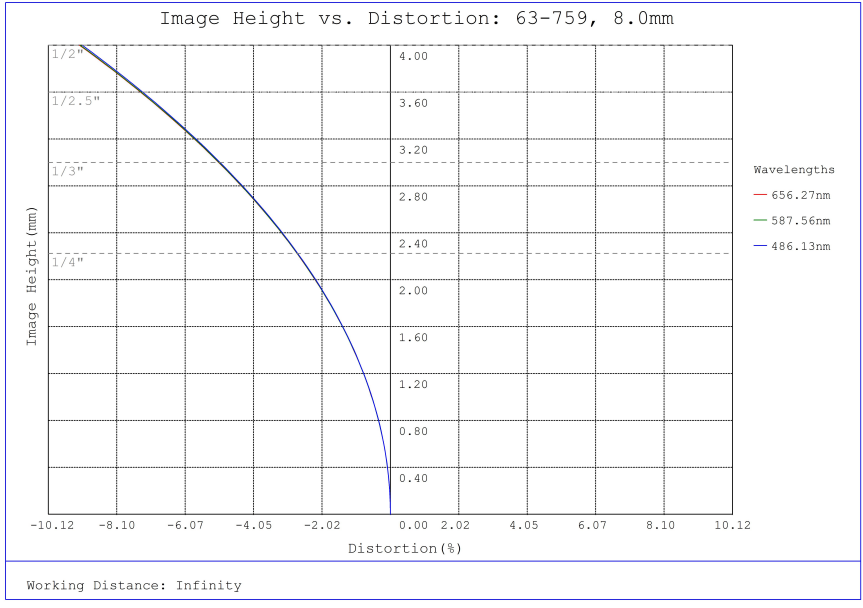
TECHSPEC® HEO Series M12 Lenses integrate high performance optics into a sealed, ruggedized enclosure. Designed to meet IEC Ingress Protection Codes IPX7 and IPX9K, these lenses withstand exposure to water up to 1 meter depth for 30 minutes and operate in close-range high-pressure, high-temperature water spray downs. Threaded for M12 x0.5, these lenses are optimized for 1/3" and 1/2" sensor formats. Each HEO Series Lens is waterproof, dustproof, and fog proof with the ability to be hermetically sealed to a camera. TECHSPEC® HEO Series M12 Lenses are ideal for harsh environment applications, such as automotive. Prescription data is available by submitting a [Request for Prescription Form](#)

**Note:** Compatible [TECHSPEC® M12 Imaging Lens Accessories](#) available.

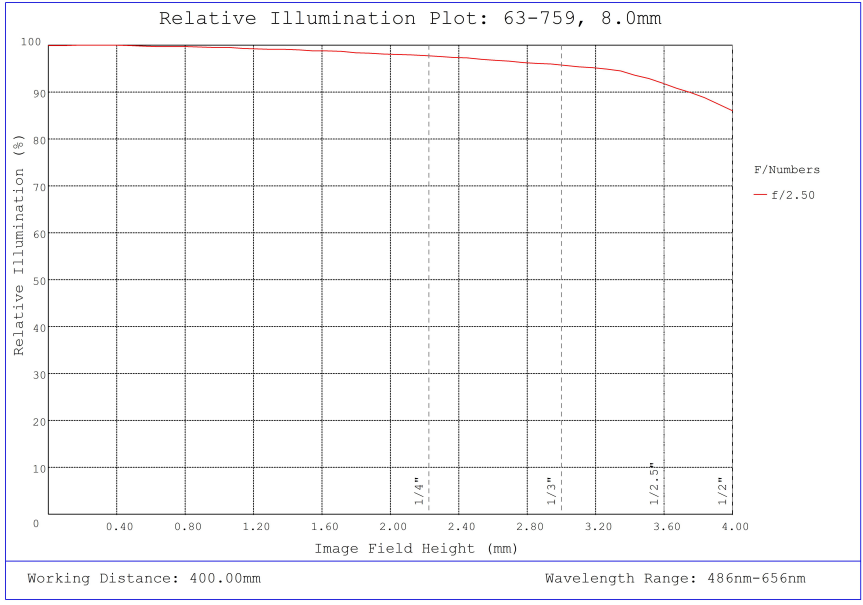
Edmund Optics has created multiple product families of our TECHSPEC® M12 S-Mount Lenses, which are designed to provide high resolution. These high performance lenses feature precision glass designs in a metal housing and have optimized specifications between each product family to meet your application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

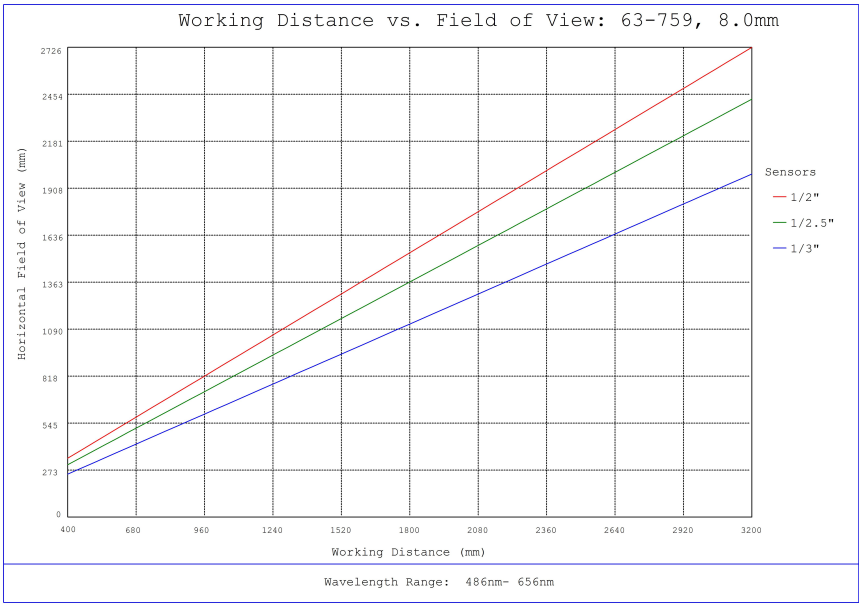
TECHNICAL INFORMATION



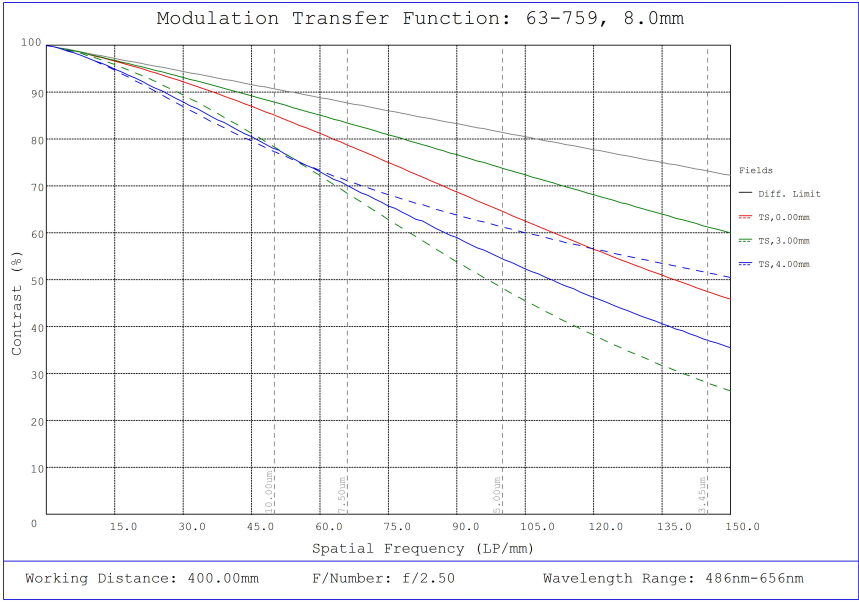
#63-759, f/2.5, Visible, 8.0mm HEO Series M12 Lens, Distortion Plot



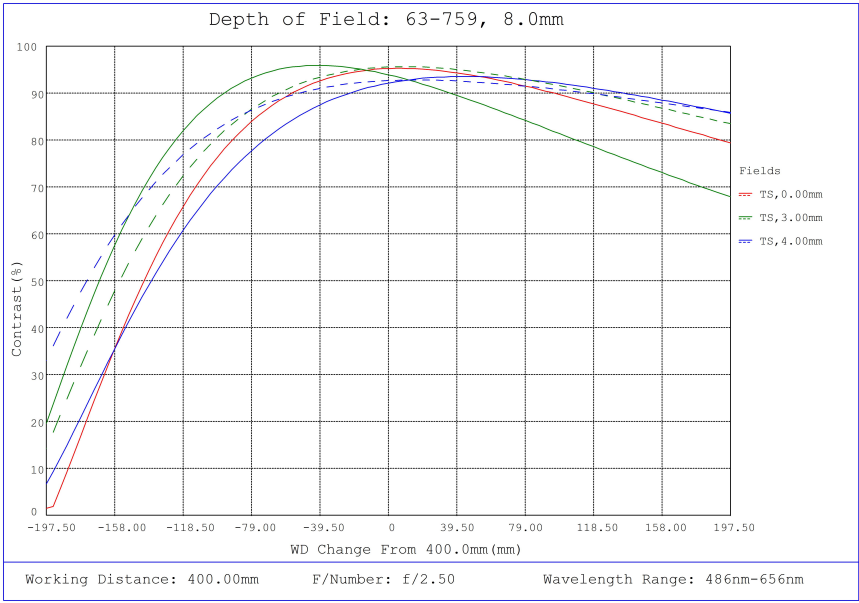
#63-759, f/2.5, Visible, 8.0mm HEO Series M12 Lens, Relative Illumination Plot



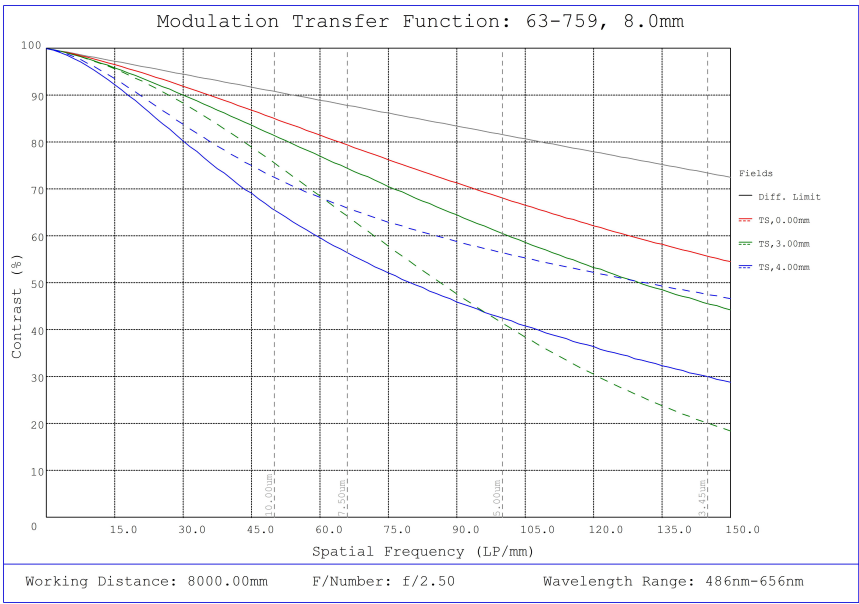
#63-759, f/2.5, Visible, 8.0mm HEO Series M12 Lens, Working Distance versus Field of View Plot



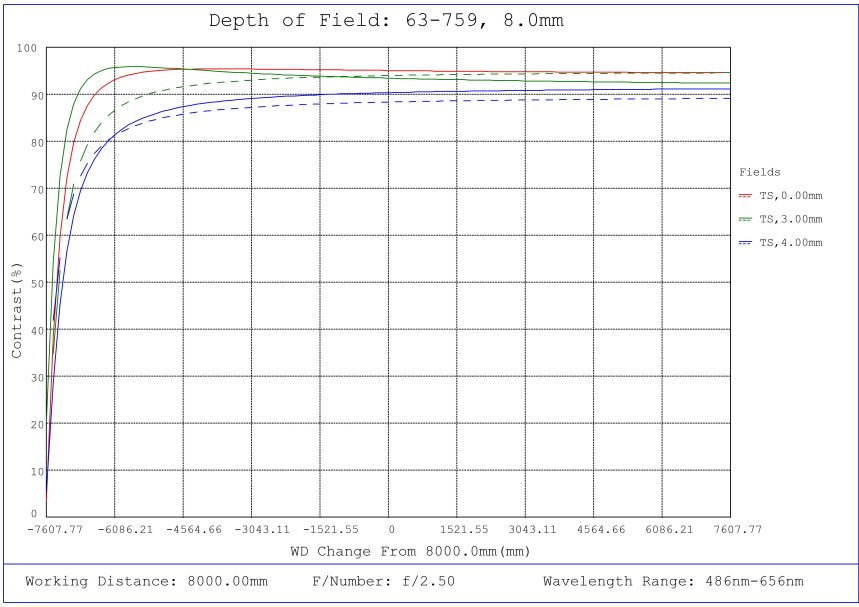
#63-759, f/2.5, Visible, 8.0mm HEO Series M12 Lens, Modulated Transfer Function (MTF) Plot, 400mm Working Distance, f2.5



#63-759, f/2.5, Visible, 8.0mm HEO Series M12 Lens, Depth of Field Plot, 400mm Working Distance, f2.5



#63-759, f/2.5, Visible, 8.0mm HEO Series M12 Lens, Modulated Transfer Function (MTF) Plot, 8000mm Working Distance, f2.5



#63-759, f/2.5, Visible, 8.0mm HEO Series M12 Lens, Depth of Field Plot, 8000mm Working Distance, f2.5

| Focal Length | A      | B      | C     | D     |
|--------------|--------|--------|-------|-------|
| 2.2mm        | 21.0mm | 16.4mm | 2.2mm | 5.4mm |
| 3.6mm        | 14.0mm | 14.1mm | 4.5mm | 4.5mm |
| 8.0mm        | 14.0mm | 15.0mm | 8.7mm | 4.0mm |

M12 x 0.5 Mounting Thread

A

B

C

D

Image Plane