

TECHSPEC<sup>®</sup> 12mm f/8, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens



12mm FL HPi Series Fixed Focal Length Lens



Stock **#36-768** 3 In Stock

-

1

+

A\$1,000<sup>.00</sup>

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| Volume Pricing |                               |
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| Qty 1+         | A\$1,000.00 each              |
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Product Downloads

| General                          |              |
|----------------------------------|--------------|
| HRi Series                       | Series:      |
| Fixed Focal Length Lens          | Type:        |
| Physical & Mechanical Properties |              |
| Fixed                            | Iris Option: |

|       |                               |
|-------|-------------------------------|
| 39.20 | Length (mm):                  |
| 33    | Maximum Diameter (mm):        |
| 33    | Outer Diameter (mm):          |
| 57    | Weight (g):                   |
| 1.63  | Maximum Rear Protrusion (mm): |

Optical Properties

|                                                                                   |                                               |
|-----------------------------------------------------------------------------------|-----------------------------------------------|
| 90.2mm - 42.0°                                                                    | Horizontal Field of View @ Max Sensor Format: |
| Horizontal: 90.1mm - 42°<br>Vertical: 66.8mm - 31.9°<br>Diagonal: 114.2mm - 51.8° | Field of View at Max Sensor Format:           |
| 90.2mm - 42.0°                                                                    | Horizontal Field of View, 2/3" Sensor:        |
| 73.1mm - 34.7°                                                                    | Horizontal Field of View, 1/1.8" Sensor:      |
| 64.8mm - 30.9°                                                                    | Horizontal Field of View, 1/2" Sensor:        |
| 58.6mm - 28.1°                                                                    | Horizontal Field of View, 1/2.5" Sensor:      |
| 48.3mm - 23.3°                                                                    | Horizontal Field of View, 1/3" Sensor:        |
| 36.1mm - 17.5°                                                                    | Horizontal Field of View, 1/4" Sensor:        |
| 11.00                                                                             | Maximum Image Circle (mm):                    |
| 0.0061                                                                            | Numerical Aperture NA, Object Side:           |
| 10 (6)                                                                            | Number of Elements (Groups):                  |
| 12.00                                                                             | Focal Length FL (mm):                         |
| 100 - ∞                                                                           | Working Distance (mm):                        |
| f/8                                                                               | Aperture (f/#):                               |
| 425 - 675nm BBAR                                                                  | Coating:                                      |
| 425 - 675nm BBAR                                                                  | Coating Specification:                        |
| 17.6                                                                              | Entrance Pupil Position (mm):                 |
| 26.32                                                                             | Object Space Principal Plane (mm):            |
| 2.81                                                                              | Image Space Principal Plane (mm):             |
| -3.28                                                                             | Maximum Distortion (%):                       |
| -31.25                                                                            | Exit Pupil Position (mm):                     |
| 1000 - ∞                                                                          | Optimized Working Distance (mm):              |

|     |                        |
|-----|------------------------|
| VIS | Lens Wavelength Range: |
|-----|------------------------|

Sensor

|      |                        |
|------|------------------------|
| 2/3" | Maximum Sensor Format: |
| 1.85 | Pixel Size (µm):       |

Threading & Mounting

|                      |                |
|----------------------|----------------|
| M30.5 x0.50 (Female) | Filter Thread: |
| C-Mount              | Mount:         |

Environmental & Durability Factors

|  |                           |
|--|---------------------------|
|  | Storage Temperature (°C): |
|--|---------------------------|

-20 to +60

Type of Ruggedization:  
Industrial (Fixed Aperture with Simplified Mechanics)

Regulatory Compliance

Certificate of Conformance:  
[View](#)

Product Details

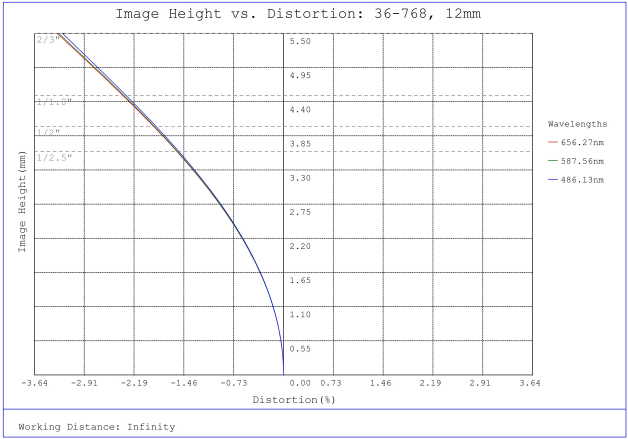
- 2/3", C-Mount Lens
- Up to 10 MegaPixels, 1.85µm Pixel Size Sensors
- Instrumentation (HRi) Versions of our HR Series Lenses with Streamlined Mechanical Designs and Fixed Apertures
- 8.5mm to 12mm Focal Length
- [Ruggedized \(HRr\) Designs](#) Also Available

TECHSPEC® HRi Series Fixed Focal Length Lenses are a streamlined version of our HR Series Lenses. There are multiple options available for each focal length to accommodate a variety of optimized working distance ranges. Designed for high volume imaging applications, HPi series lenses feature simplified focus mechanics and a fixed aperture. TECHSPEC HRi Series Fixed Focal Length Lenses are available in a variety of f/# options, making them ideal for applications that require reduced size, cost, and lockable focus imaging solutions. Call for OEM Quantity Pricing.

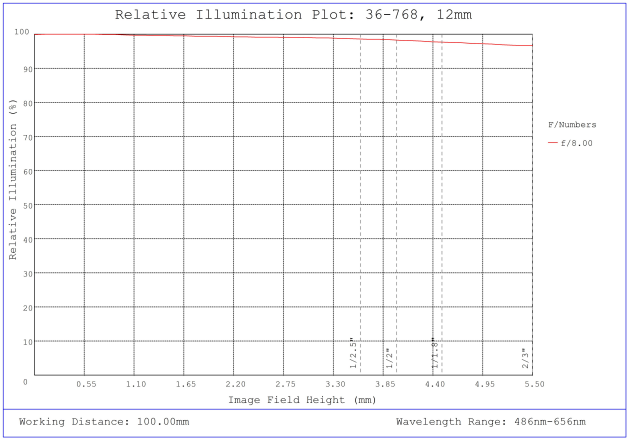
Edmund Optics has created a family of high performance optical designs (the HR Series family) and developed three customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the HR Series Lenses, providing the same optical performance in a variety of optomechanical solutions to meet your application requirements:

- [HR Series](#): Features locking cam focus and iris adjustment. This is the most adjustable version of these optical designs and is the typical high quality machine vision lens.
- [HRI Series](#): Simplified mechanics featuring fixed apertures with compact housing. [Industrial Ruggedization](#) for reduced size, cost, and locked focus.
- [HRr Series](#): All optics glued in place and a locking C-clamp focus ring. [Stabilized Ruggedization](#) for reduced pixel shift and improved focus stability.

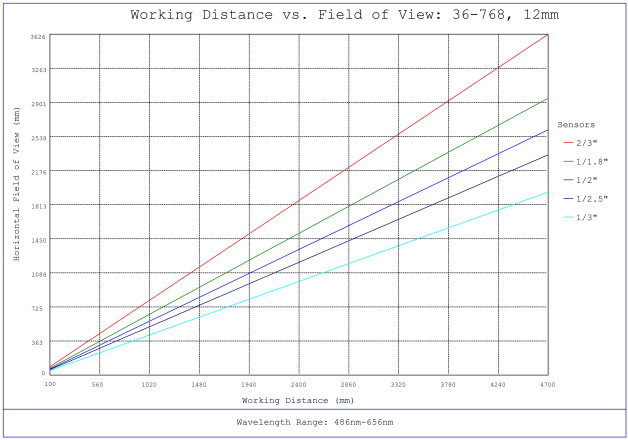
Technical Information



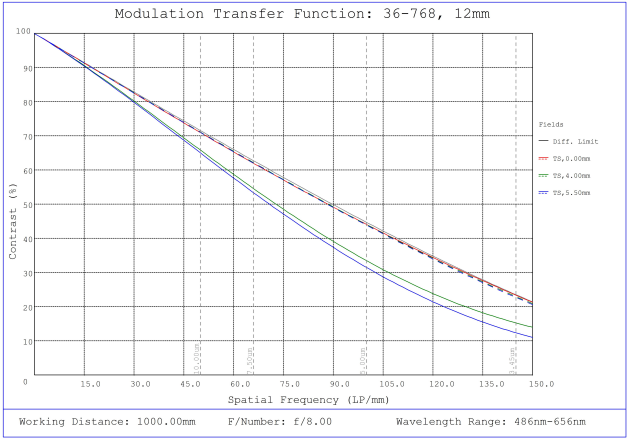
#36-768, 12mm f/8, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Distortion Plot



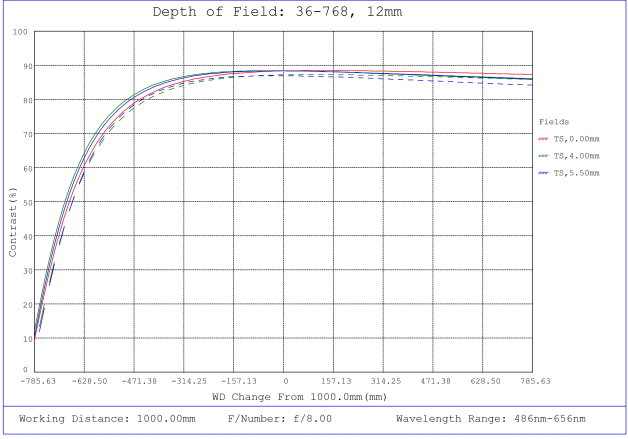
#36-768, 12mm f/8, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Relative Illumination Plot



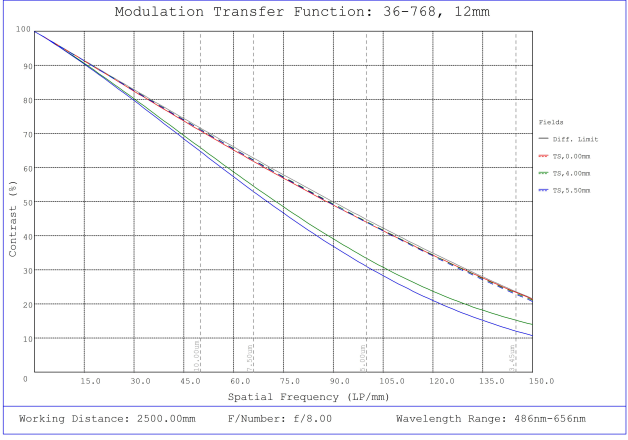
#36-768, 12mm f/8, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



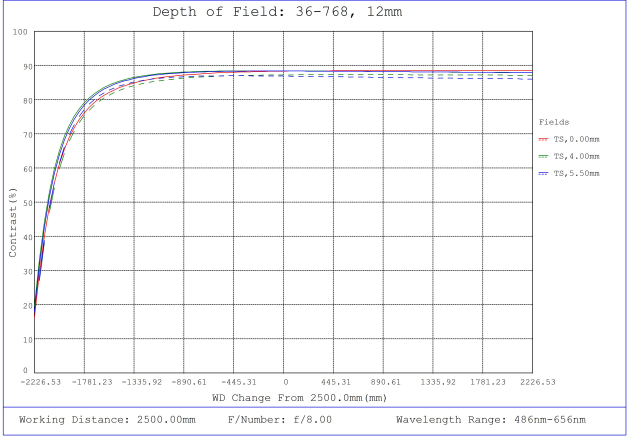
#36-768, 12mm f/8, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 1000mm Working Distance, f8



#36-768, 12mm f/8, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Depth of Field Plot, 1000mm Working Distance, f8



#36-768, 12mm f/8, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 2500mm Working Distance, f8



#36-768, 12mm f/8, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Depth of Field Plot, 2500mm Working Distance, f8

Compatible Cameras