

[See all 25 Products in Family](#)

**TECHSPEC® 8.5mm f/4, 75mm-∞ Primary WD, HRi Series Fixed Focal Length Lens**



8.5mm f/4, 2/3" HPI Series Fixed Focal Length Lens, #36-750



Stock **#36-750** **3 In Stock**

⊖ 1 ⊕ **\$821<sup>00</sup>**

**ADD TO CART**

Volume Pricing	
Qty 1+	\$821.00 each
Need More?	<a href="#">Request Quote</a>

Product Downloads

**General**

HRi Series **Product Family:**  
Fixed Focal Length Lens **Type:**

**Physical & Mechanical Properties**

Fixed **Iris Option:**

44.57 Length (mm):

40 Maximum Diameter (mm):

40 Outer Diameter (mm):

84 Weight (g):

1.31 Maximum Rear Protrusion (mm):

## Optical Properties

Horizontal Field of View @ Max Sensor Format:  
101.4mm - 56.8°

Field of View at Max Sensor Format:  
Horizontal: 101.4mm - 56.8°  
Vertical: 74.2mm - 43.5°  
Diagonal: 130.4mm - 68.9°

Horizontal Field of View, 2/3" Sensor:  
101.4mm - 56.8°

Horizontal Field of View, 1/1.8" Sensor:  
81.5mm - 47.2°

Horizontal Field of View, 1/2" Sensor:  
71.9mm - 42.2°

Horizontal Field of View, 1/2.5" Sensor:  
64.8mm - 38.4°

Horizontal Field of View, 1/3" Sensor:  
53.2mm - 32.0°

Horizontal Field of View, 1/4" Sensor:  
39.6mm - 24.1°

11.00 Maximum Image Circle (mm):

0.0112 Numerical Aperture NA, Object Side:

9 (8) Number of Elements (Groups):

8.50 Focal Length FL (mm):

75 - ∞ Working Distance (mm):

f/4 Aperture (f/#):

425 - 675nm BBAR Coating:

425 - 675nm BBAR Coating Specification:

18.85 Entrance Pupil Position (mm):

25.03 Object Space Principal Plane (mm):

4.70 Image Space Principal Plane (mm):

-5.6 Maximum Distortion (%):

-17.93 Exit Pupil Position (mm):

75 - ∞ Optimized Working Distance (mm):

VIS Lens Wavelength Range:

## Sensor

2/3" Maximum Sensor Format:

1.85 Pixel Size (µm):

## Threading & Mounting

M58 x 0.75 (Male) Filter Thread:

#87-425 (Required) Filter Thread Adapter:

M40 x 0.5 (Male) Front Thread:

C-Mount

Mount:

## Environmental & Durability Factors

-20 to +60

Storage Temperature (°C):

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

## Regulatory Compliance

[View](#)

Certificate of Conformance:

## Product Details

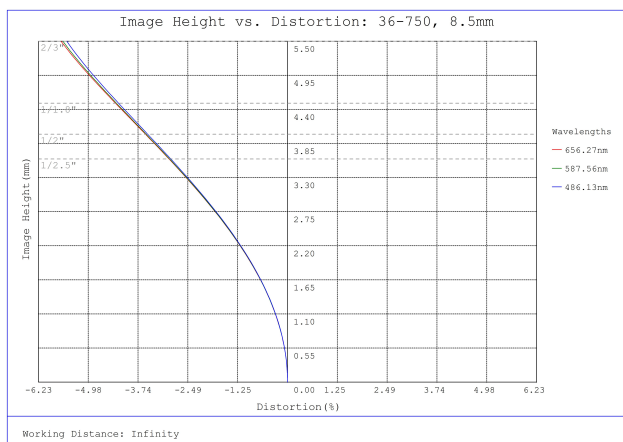
- 2/3", C-Mount Lens
- Up to 10 MegaPixels, 1.85µm Pixel Size Sensors
- Instrumentation (HRI) Versions of our HR Series Lenses with Streamlined Mechanical Designs and Fixed Apertures
- 8.5mm to 12mm Focal Length
- [Ruggedized \(HRr\) Designs](#) Also Available

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.

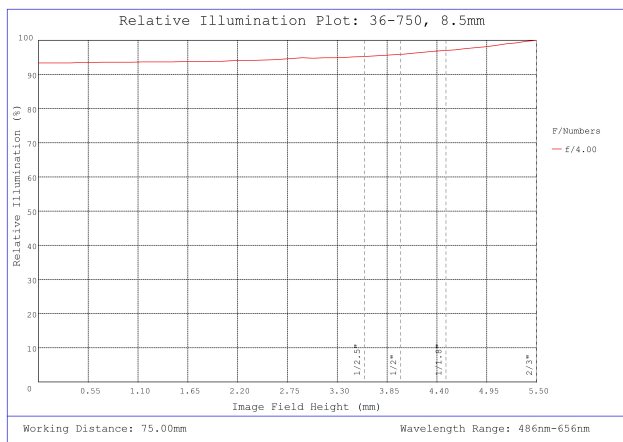
Edmund Optics has created a family of high performance optical designs (the HR Series family) and developed three customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the HR Series Lenses, providing the same optical performance in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

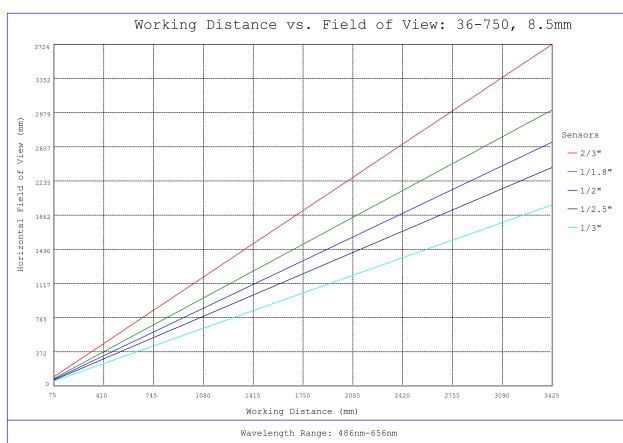
## Technical Information



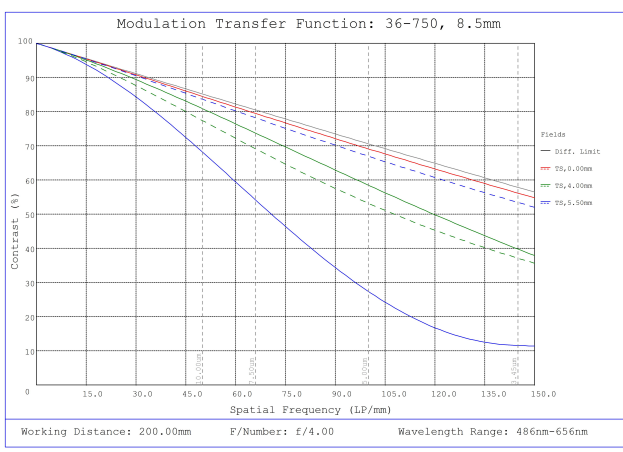
#36-750, 8.5mm f/4, 75mm-∞ Primary WD, HRI Series Fixed Focal Length Lens, Distortion Plot



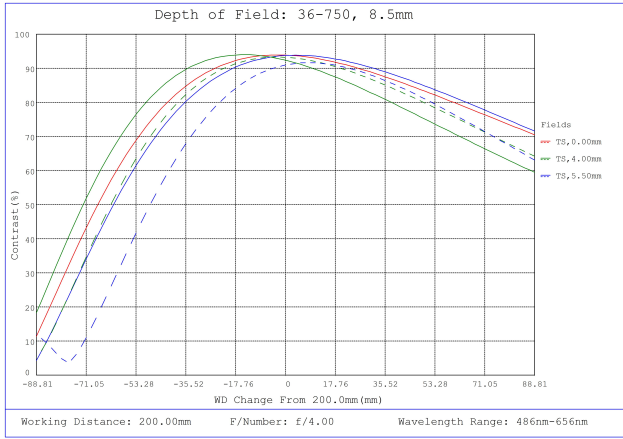
#36-750, 8.5mm f/4, 75mm-∞ Primary WD, HRI Series Fixed Focal Length Lens, Relative Illumination Plot



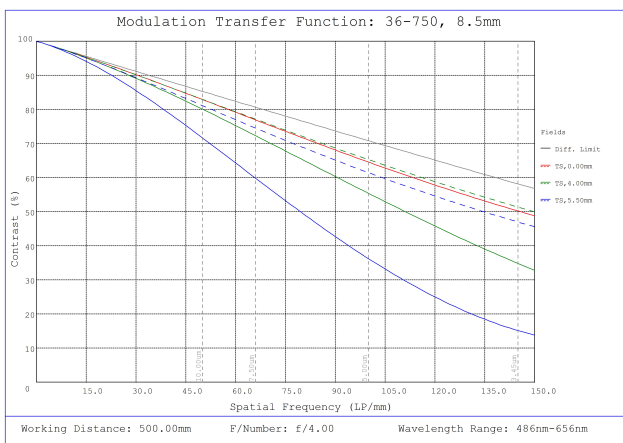
#36-750, 8.5mm f/4, 75mm-∞ Primary WD, HRI Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



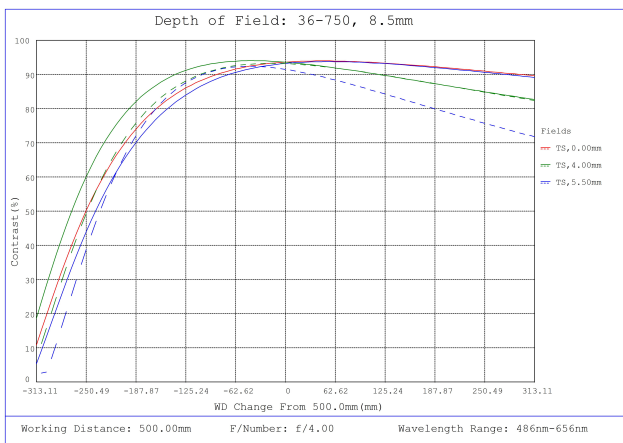
#36-750, 8.5mm f/4, 75mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 200mm Working Distance, f4



#36-750, 8.5mm f/4, 75mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Depth of Field Plot, 200mm Working Distance, f4



#36-750, 8.5mm f/4, 75mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 500mm Working Distance, f4



#36-750, 8.5mm f/4, 75mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Depth of Field Plot, 500mm Working Distance, f4

## Compatible Cameras