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**TECHSPEC® 12mm f/2.8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens**



12mm f/2.8, 150-500mm Primary WD, HPI Series Fixed Focal Length Lens, #36-757



Stock **#36-757** CLEARANCE **5 In Stock**

⊖ 1 ⊕ **C\$937<sup>50</sup>**

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Qty 1+	C\$937.50 each
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**General**

HRi Series **Product Family:**

Fixed Focal Length Lens **Type:**

High Performance Lens with Fixed Apertures and Compact Form Factor **Imaging Lens Type:**

## Physical & Mechanical Properties

Fixed	<b>Iris Option:</b>
39.20	<b>Length (mm):</b>
33	<b>Maximum Diameter (mm):</b>
33	<b>Outer Diameter (mm):</b>
57	<b>Weight (g):</b>
1.63	<b>Maximum Rear Protrusion (mm):</b>

## Optical Properties

**Horizontal Field of View @ Max Sensor Format:**  
87.7mm - 41.1°

**Field of View at Max Sensor Format:**  
Horizontal: 87.7mm - 41.1°  
Vertical: 65.1mm - 31.2°  
Diagonal: 111mm - 50.7°

**Horizontal Field of View, 2/3" Sensor:**  
87.7mm - 41.1°

**Horizontal Field of View, 1/1.8" Sensor:**  
71.2mm - 33.9°

**Horizontal Field of View, 1/2" Sensor:**  
63.1mm - 30.2°

**Horizontal Field of View, 1/2.5" Sensor:**  
57.0mm - 27.4°

**Horizontal Field of View, 1/3" Sensor:**  
47.0mm - 22.8°

**Horizontal Field of View, 1/4" Sensor:**  
35.2mm - 17.1°

**Maximum Image Circle (mm):**  
11.00

**Numerical Aperture NA, Object Side:**  
0.0179

**Number of Elements (Groups):**  
10 (6)

**Focal Length FL (mm):**  
12.00

**Working Distance (mm):**  
100 - ∞

**Aperture (f/#):**  
f/2.8

**Coating:**  
425 - 675nm BBAR

**Coating Specification:**  
425 - 675nm BBAR

**Entrance Pupil Position (mm):**  
17.46

**Object Space Principal Plane (mm):**  
26.28

**Image Space Principal Plane (mm):**  
2.98

**Maximum Distortion (%):**  
-3.15

**Exit Pupil Position (mm):**  
-30.39

**Optimized Working Distance (mm):**  
150 - 500

**Lens Wavelength Range:**  
VIS

## Sensor

**Maximum Sensor Format:**  
2/3"

**Pixel Size (µm):**  
1.85

## Threading & Mounting

**Filter Thread:**  
M30.5 x 0.50 (Female)

**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, HRi 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.

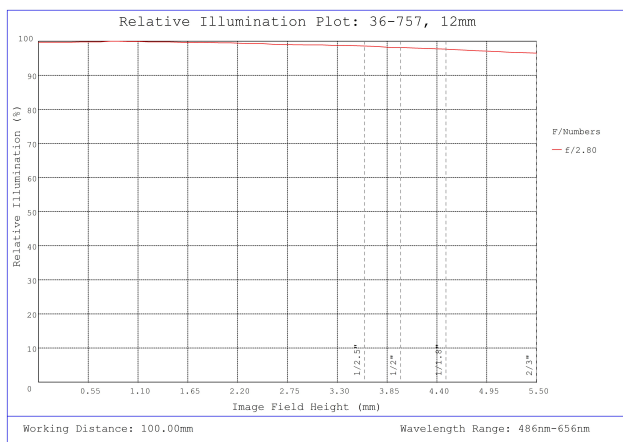
Edmund Optics has created a family of high performance optical designs (the HR Series family) and developed three customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the HR Series Lenses, providing the same optical performance in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

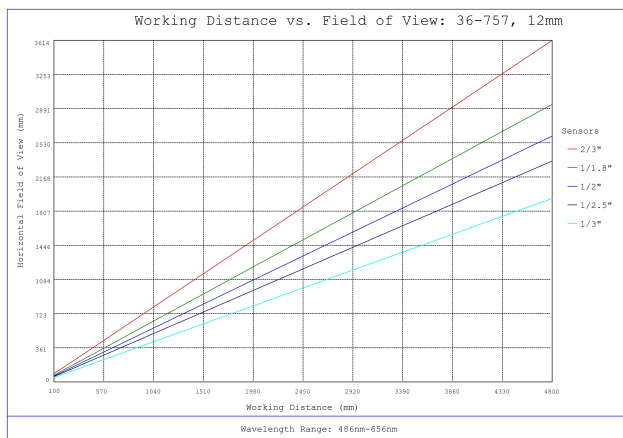
## Technical Information



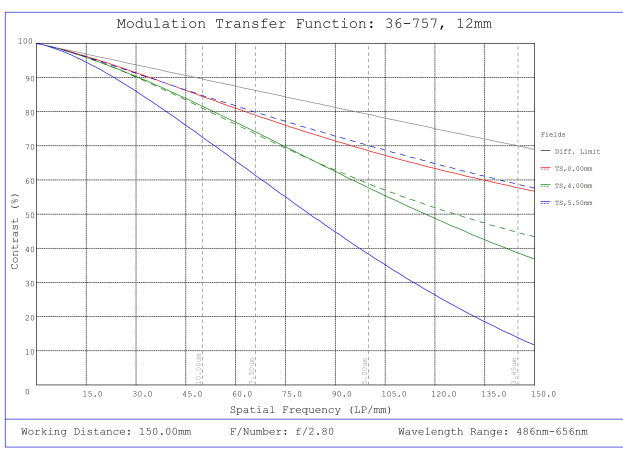
#36-757, 12mm f/2.8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Distortion Plot



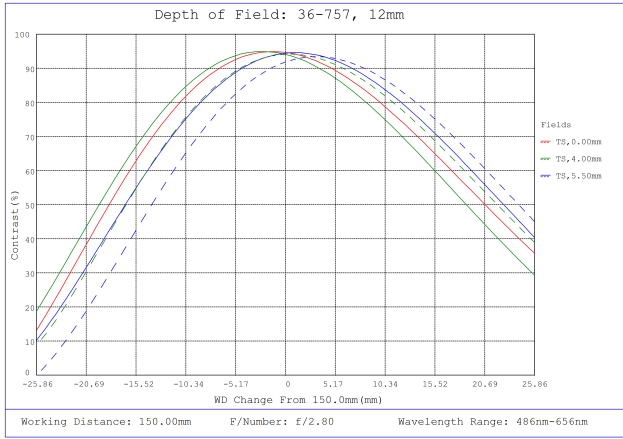
#36-757, 12mm f/2.8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Relative Illumination Plot



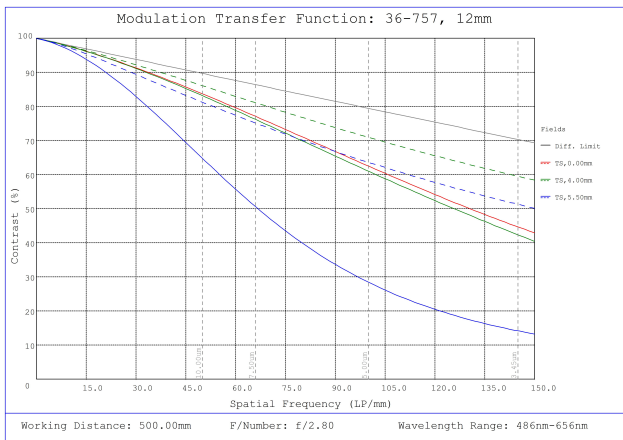
#36-757, 12mm f/2.8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



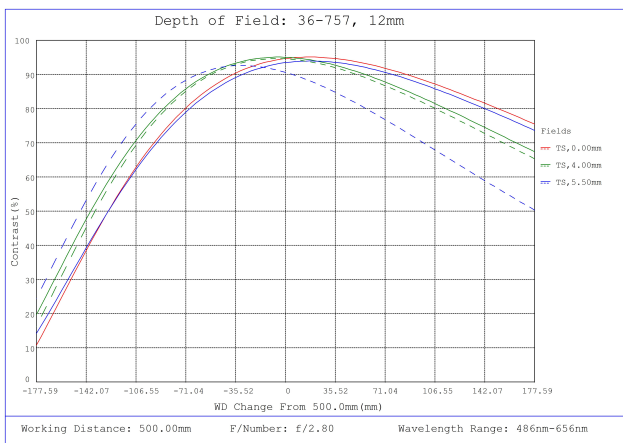
#36-757, 12mm f/2.8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 150mm Working Distance, f2.8



#36-757, 12mm f/2.8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Depth of Field Plot, 150mm Working Distance, f2.8



#36-757, 12mm f/2.8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 500mm Working Distance, f2.8



#36-757, 12mm f/2.8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Depth of Field Plot, 500mm Working Distance, f2.8

## Compatible Cameras