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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\$658<sup>43</sup>**

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Volume Pricing

Qty 1+	<b>C\$658.43</b> each
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**General**

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

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

**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

87.7mm - 41.1°	<b>Horizontal Field of View @ Max Sensor Format:</b>
Horizontal: 87.7mm - 41.1° Vertical: 65.1mm - 31.2° Diagonal: 111mm - 50.7°	<b>Field of View at Max Sensor Format:</b>
87.7mm - 41.1°	<b>Horizontal Field of View, 2/3" Sensor:</b>
71.2mm - 33.9°	<b>Horizontal Field of View, 1/1.8" Sensor:</b>
63.1mm - 30.2°	<b>Horizontal Field of View, 1/2" Sensor:</b>
57.0mm - 27.4°	<b>Horizontal Field of View, 1/2.5" Sensor:</b>
47.0mm - 22.8°	<b>Horizontal Field of View, 1/3" Sensor:</b>
35.2mm - 17.1°	<b>Horizontal Field of View, 1/4" Sensor:</b>
11.00	<b>Maximum Image Circle (mm):</b>
0.0179	<b>Numerical Aperture NA, Object Side:</b>
10 (6)	<b>Number of Elements (Groups):</b>
12.00	<b>Focal Length FL (mm):</b>
100 - ∞	<b>Working Distance (mm):</b>
f/2.8	<b>Aperture (f#):</b>
425 - 675nm BBAR	<b>Coating:</b>
425 - 675nm BBAR	<b>Coating Specification:</b>
17.46	<b>Entrance Pupil Position (mm):</b>
26.28	<b>Object Space Principal Plane (mm):</b>
2.98	<b>Image Space Principal Plane (mm):</b>
-3.15	<b>Maximum Distortion (%):</b>
-30.39	<b>Exit Pupil Position (mm):</b>
150 - 500	<b>Optimized Working Distance (mm):</b>
VS	<b>Lens Wavelength Range:</b>

## Sensor

2/3"	<b>Maximum Sensor Format:</b>
1.85	<b>Pixel Size (μm):</b>

## Threading & Mounting

M30.5 x 0.50 (Female)	<b>Filter Thread:</b>
C-Mount	<b>Mount:</b>

## 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

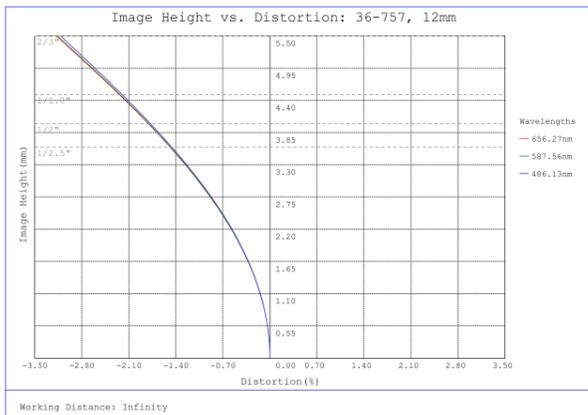
- 2/3", C-Mount Lens
- Up to 10 MegaPixels, 1.85µm Pixel Size Sensors
- Instrumentation (HRi) Versions of our HR Series Lenses with Streamlined Mechanical Designs and Fixed Apertures
- 8.5mm to 12mm Focal Length
- [Ruggedized \(HRr\) Designs](#) Also Available

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, 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.

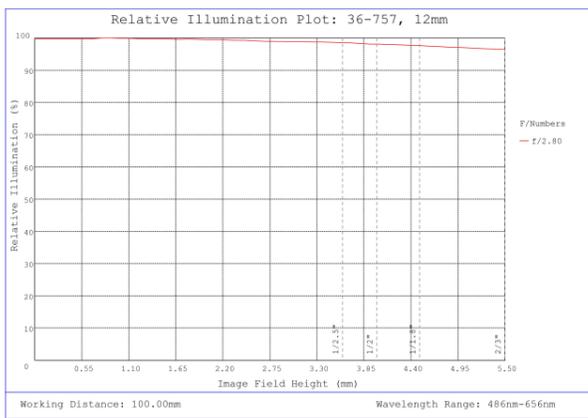
Edmund Optics has created a family of high performance optical designs (the HR Series family) and developed three customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the HR Series Lenses, providing the same optical performance in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

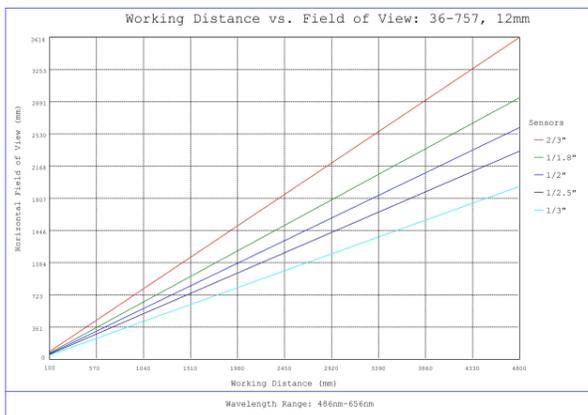
## Technical Information



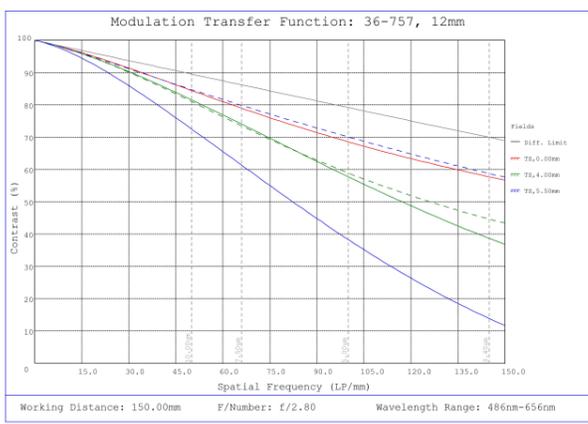
#36-757, 12mm f/2.8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Distortion Plot



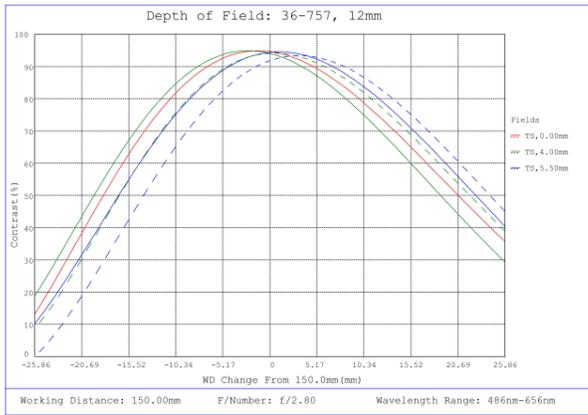
#36-757, 12mm f/2.8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Relative Illumination Plot



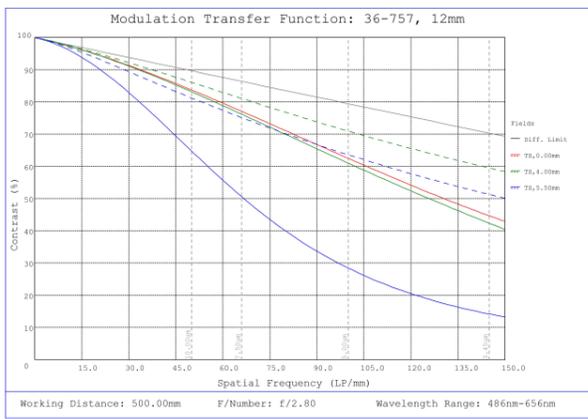
#36-757, 12mm f/2.8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



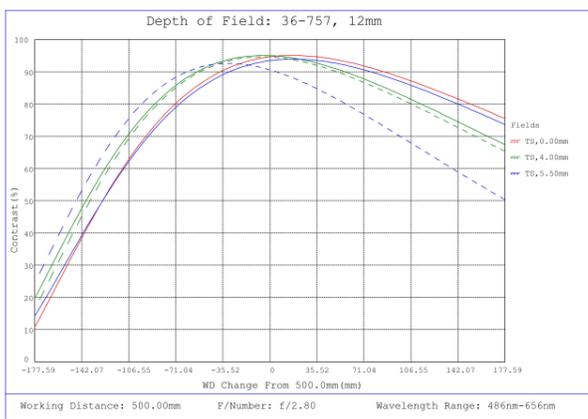
#36-757, 12mm f/2.8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 150mm Working Distance, f2.8



#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