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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 **3 In Stock**

⊖ 1 ⊕ £351<sup>16</sup>

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Volume Pricing	
Qty 1+	£351.16 each
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**!** Prices shown are exclusive of VAT/local taxes

Product Downloads

**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 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

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°

11.00 Maximum Image Circle (mm):

0.0179 Numerical Aperture NA, Object Side:

10 (6) Number of Elements (Groups):

12.00 Focal Length FL (mm):

100 - ∞ Working Distance (mm):

f/2.8 Aperture (f#):

425 - 675nm BBAR Coating:

425 - 675nm BBAR Coating Specification:

17.46 Entrance Pupil Position (mm):

26.28 Object Space Principal Plane (mm):

2.98 Image Space Principal Plane (mm):

-3.15 Maximum Distortion (%):

-30.39 Exit Pupil Position (mm):

150 - 500 Optimized Working Distance (mm):

VS Lens Wavelength Range:

## Sensor

2/3" Maximum Sensor Format:

1.85 Pixel Size (μm):

## Threading & Mounting

M30.5 x 0.50 (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, 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.

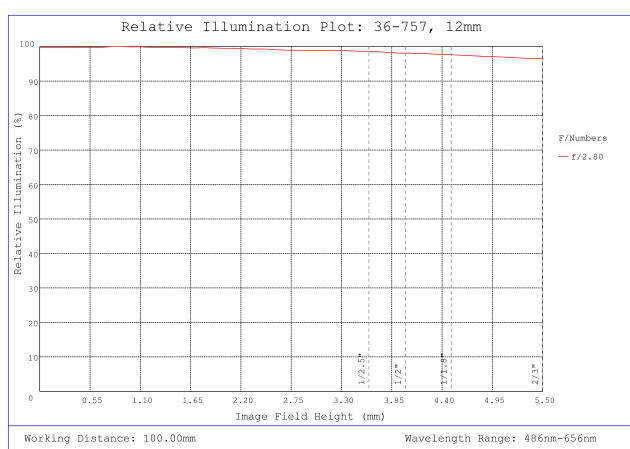
Edmund Optics has created a family of high performance optical designs (the HR Series family) and developed three customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the HR Series Lenses, providing the same optical performance in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

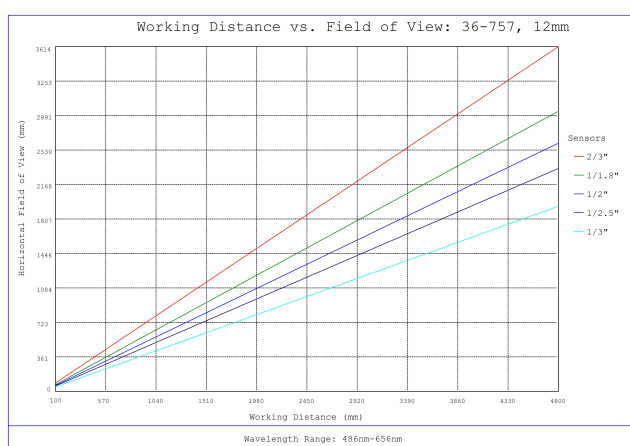
## Technical Information



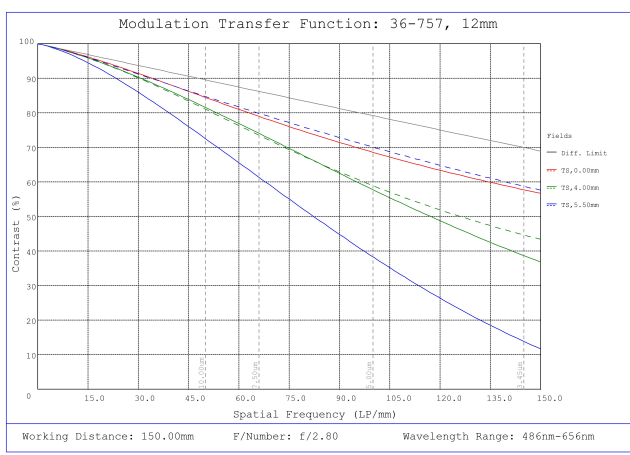
#36-757, 12mm f/2.8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Distortion Plot



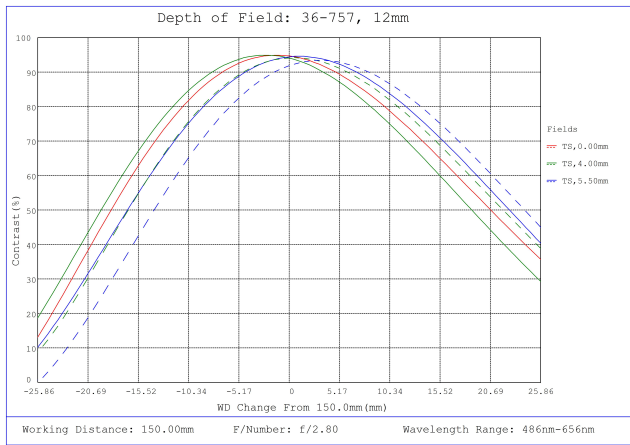
#36-757, 12mm f/2.8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Relative Illumination Plot



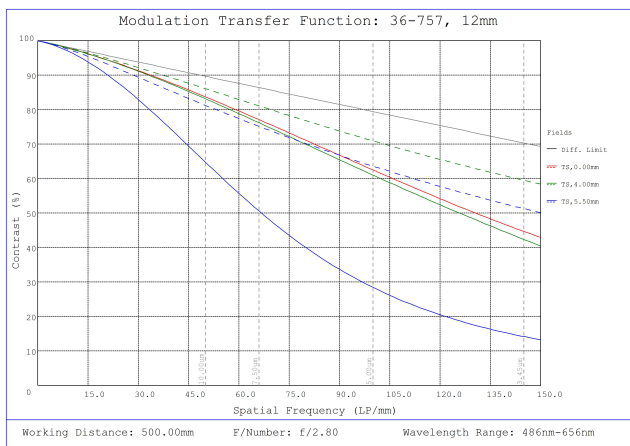
#36-757, 12mm f/2.8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



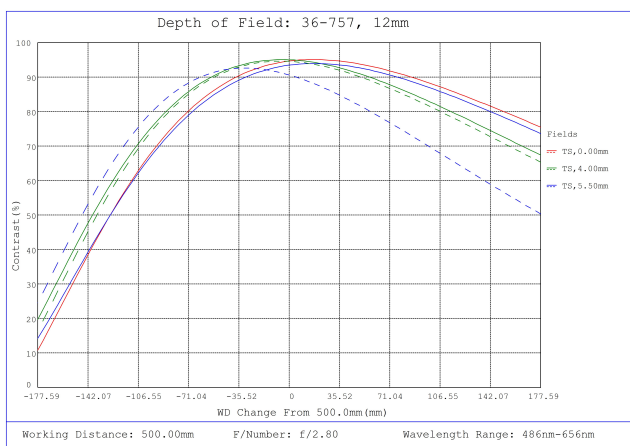
#36-757, 12mm f/2.8, 150-500mm Primary WD, HRi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 150mm Working Distance, f2.8



#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