

**TECHSPEC® 12mm f/5.6, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens**



12mm FL HPI Series Fixed Focal Length Lens



Stock #36-765 **CLEARANCE** 3 In Stock

− 1 + €625<sup>00</sup>

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Volume Pricing	
Qty 1+	€625,00 each
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Product Downloads

**General**

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

**Physical & Mechanical Properties**

**Iris Option:**

Fixed

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:  
90.2mm - 42.0°

Field of View at Max Sensor Format:  
Horizontal: 90.1mm - 42°  
Vertical: 66.8mm - 31.9°  
Diagonal: 114.2mm - 51.8°

Horizontal Field of View, 2/3" Sensor:  
90.2mm - 42.0°

Horizontal Field of View, 1/1.8" Sensor:  
73.1mm - 34.7°

Horizontal Field of View, 1/2" Sensor:  
64.8mm - 30.9°

Horizontal Field of View, 1/2.5" Sensor:  
58.6mm - 28.1°

Horizontal Field of View, 1/3" Sensor:  
48.3mm - 23.3°

Horizontal Field of View, 1/4" Sensor:  
36.1mm - 17.5°

11.00 Maximum Image Circle (mm):

0.0087 Numerical Aperture NA, Object Side:

10 (6) Number of Elements (Groups):

12.00 Focal Length FL (mm):

100 - ∞ Working Distance (mm):

f/5.6 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 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

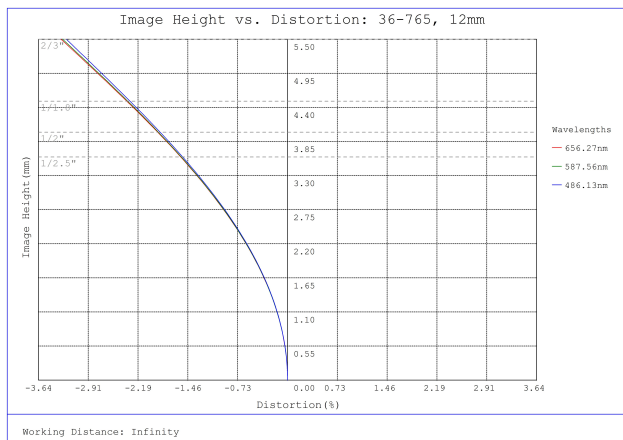
- 2/3", C-Mount Lens
- Up to 10 MegaPixels, 1.85µm Pixel Size Sensors
- Instrumentation (HRi) Versions of our HR Series Lenses with Streamlined Mechanical Designs and Fixed Apertures
- 8.5mm to 12mm Focal Length
- **Ruggedized (HRr) Designs** Also Available

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.

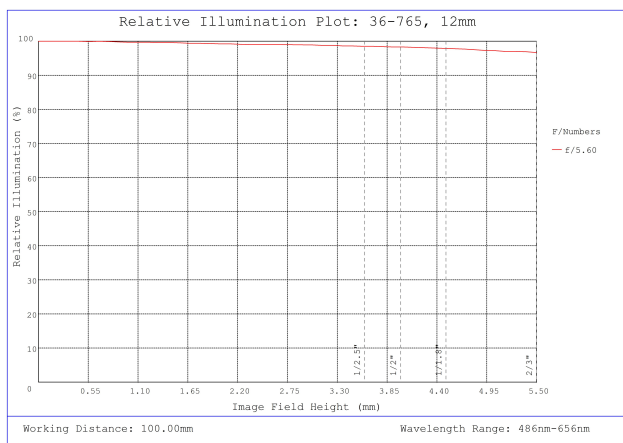
Edmund Optics has created a family of high performance optical designs (the HR Series family) and developed three customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the HR Series Lenses, providing the same optical performance in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

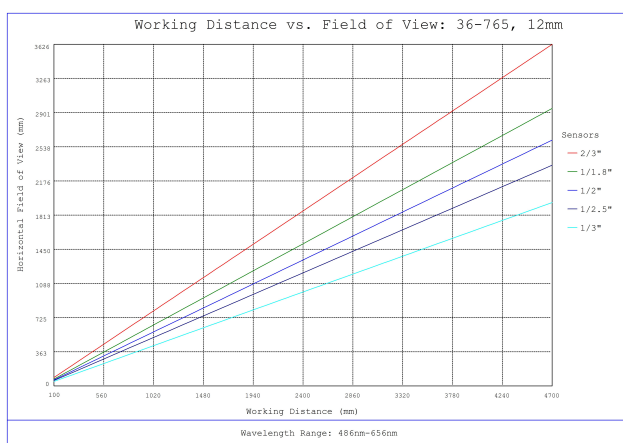
## Technical Information



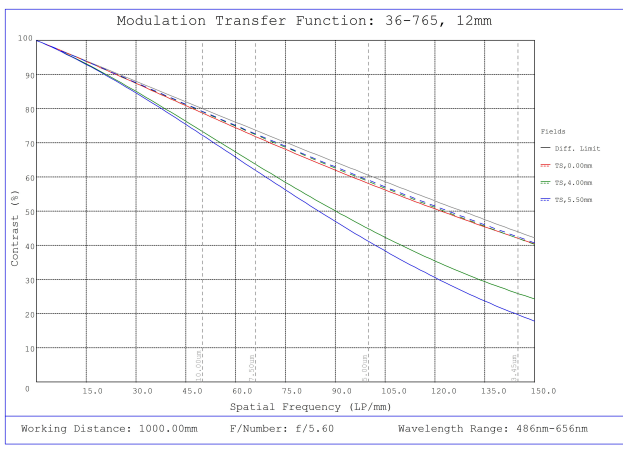
#36-765, 12mm f/5.6, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Distortion Plot



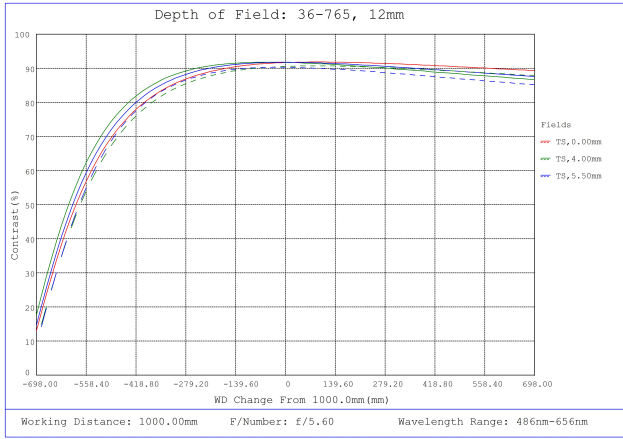
#36-765, 12mm f/5.6, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Relative Illumination Plot



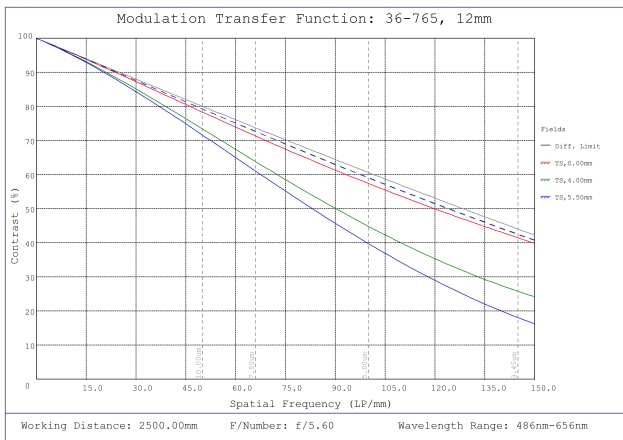
#36-765, 12mm f/5.6, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



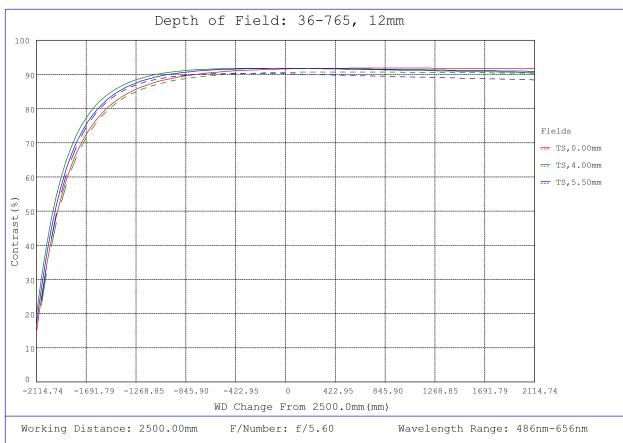
#36-765, 12mm f/5.6, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 1000mm Working Distance, f5.6



#36-765, 12mm f/5.6, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Depth of Field Plot, 1000mm Working Distance, f5.6



#36-765, 12mm f/5.6, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 2500mm Working Distance, f5.6



#36-765, 12mm f/5.6, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Depth of Field Plot, 2500mm Working Distance, f5.6

## Compatible Cameras