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**TECHSPEC® 12mm f/11, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens**



12mm FL HPI Series Fixed Focal Length Lens



Stock #36-771 CLEARANCE **2 In Stock**

⊖ 1 ⊕ £351<sup>16</sup>

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Volume Pricing	
Qty 1+	£351.16 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

90.2mm - 42.0°	Horizontal Field of View @ Max Sensor Format:
Horizontal: 90.1mm - 42° Vertical: 66.8mm - 31.9° Diagonal: 114.2mm - 51.8°	Field of View at Max Sensor Format:
90.2mm - 42.0°	Horizontal Field of View, 2/3" Sensor:
73.1mm - 34.7°	Horizontal Field of View, 1/1.8" Sensor:
64.8mm - 30.9°	Horizontal Field of View, 1/2" Sensor:
58.6mm - 28.1°	Horizontal Field of View, 1/2.5" Sensor:
48.3mm - 23.3°	Horizontal Field of View, 1/3" Sensor:
36.1mm - 17.5°	Horizontal Field of View, 1/4" Sensor:
11.00	Maximum Image Circle (mm):
0.0044	Numerical Aperture NA, Object Side:
10 (6)	Number of Elements (Groups):
12.00	Focal Length FL (mm):
100 - ∞	Working Distance (mm):
f/11	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):
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

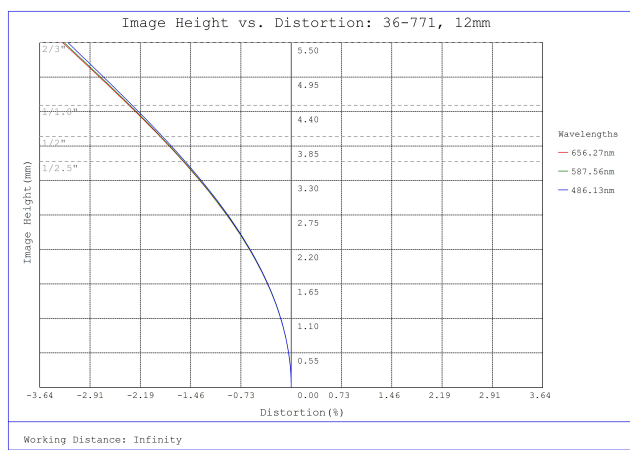
- 2/3", C-Mount Lens
- Up to 10 MegaPixels, 1.85µm Pixel Size Sensors
- Instrumentation (HRi) Versions of our HR Series Lenses with Streamlined Mechanical Designs and Fixed Apertures
- 8.5mm to 12mm Focal Length
- **Ruggedized (HRr) Designs** Also Available

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.

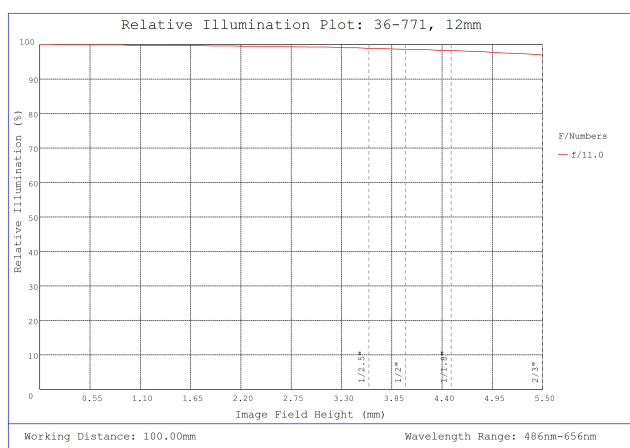
Edmund Optics has created a family of high performance optical designs (the HR Series family) and developed three customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the HR Series Lenses, providing the same optical performance in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

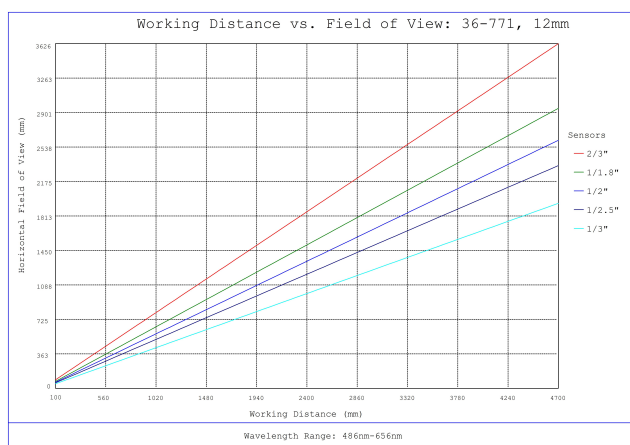
## Technical Information



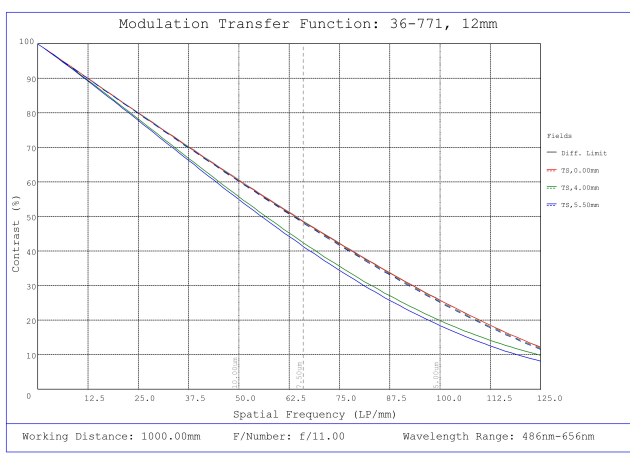
#36-771, 12mm *f*/11, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Distortion Plot



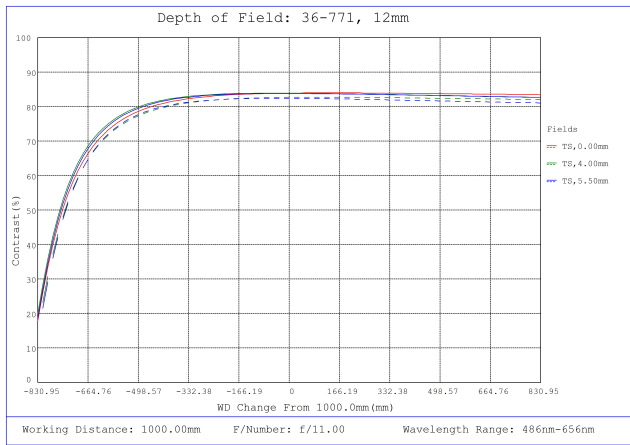
#36-771, 12mm *f*/11, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Relative Illumination Plot



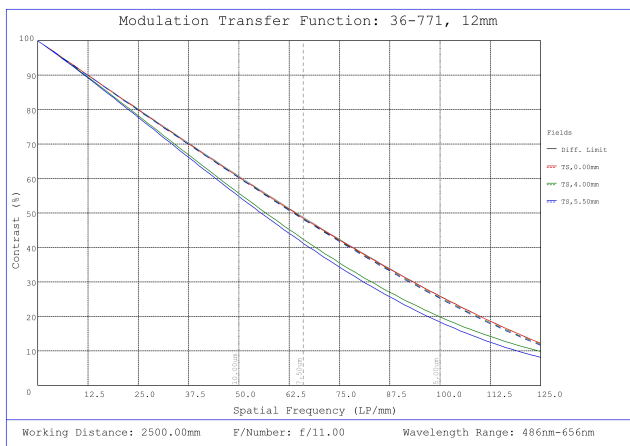
#36-771, 12mm *f*/11, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



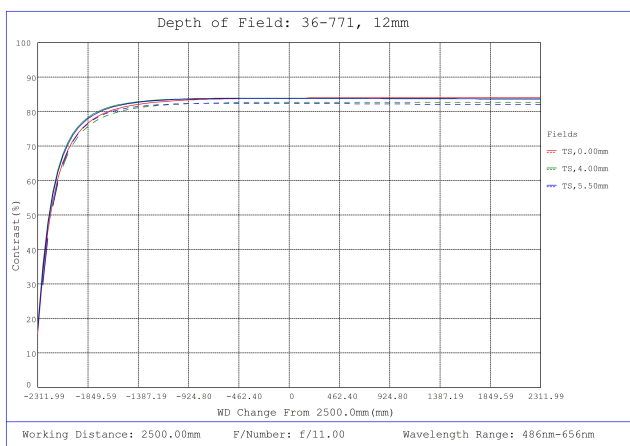
#36-771, 12mm f/11, 1000mm-∞ Primary WD, HRI Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 1000mm Working Distance, f11



#36-771, 12mm f/11, 1000mm-∞ Primary WD, HRI Series Fixed Focal Length Lens, Depth of Field Plot, 1000mm Working Distance, f11



#36-771, 12mm f/11, 2500mm-∞ Primary WD, HRI Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 2500mm Working Distance, f11



#36-771, 12mm f/11, 2500mm-∞ Primary WD, HRI Series Fixed Focal Length Lens, Depth of Field Plot, 2500mm Working Distance, f11

## Compatible Cameras