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## 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** 4 In Stock

− 1 + €625<sup>00</sup>

**ADD TO CART**

### Volume Pricing

|            |                               |
|------------|-------------------------------|
| Qty 1+     | €625,00 each                  |
| Need More? | <a href="#">Request Quote</a> |

Prices shown are exclusive of VAT/local taxes

### 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°<br>Vertical: 66.8mm - 31.9°<br>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):                    |
| 0.0087  | 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

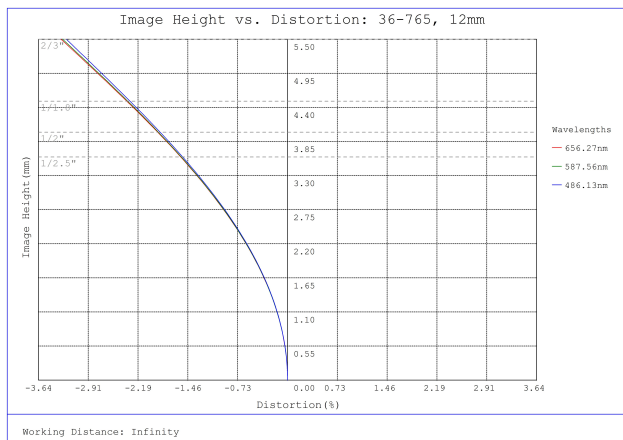
- 2/3", C-Mount Lens
- Up to 10 MegaPixels, 1.85µm Pixel Size Sensors
- Instrumentation (HRi) Versions of our HR Series Lenses with Streamlined Mechanical Designs and Fixed Apertures
- 8.5mm to 12mm Focal Length
- **Ruggedized (HRr) Designs** Also Available

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.

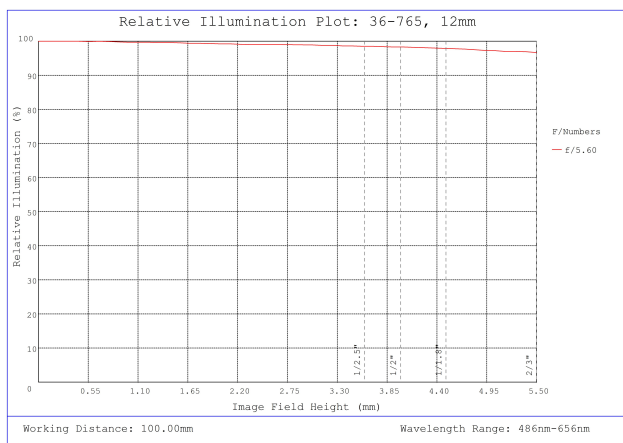
Edmund Optics has created a family of high performance optical designs (the HR Series family) and developed three customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the HR Series Lenses, providing the same optical performance in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

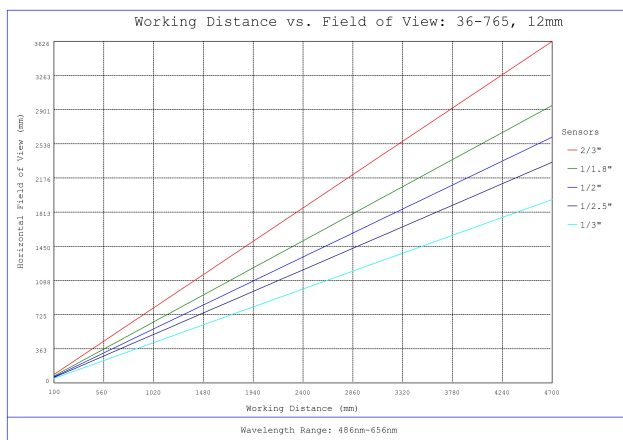
## Technical Information



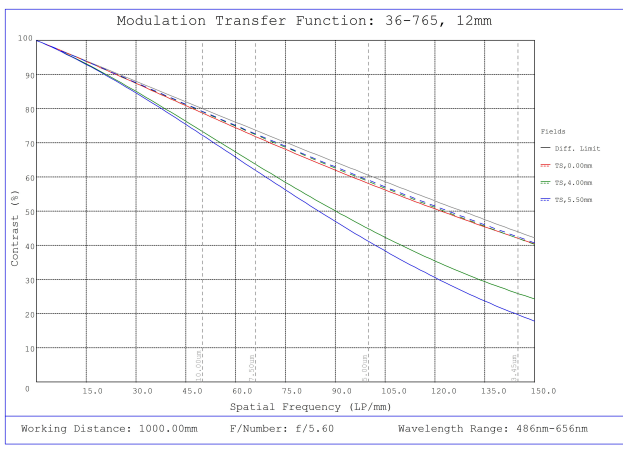
#36-765, 12mm f/5.6, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Distortion Plot



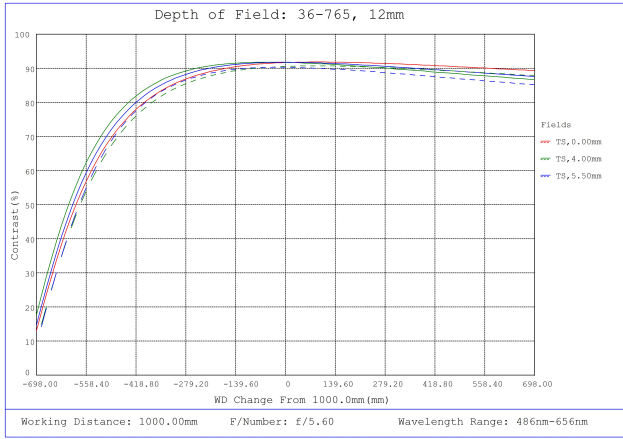
#36-765, 12mm f/5.6, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Relative Illumination Plot



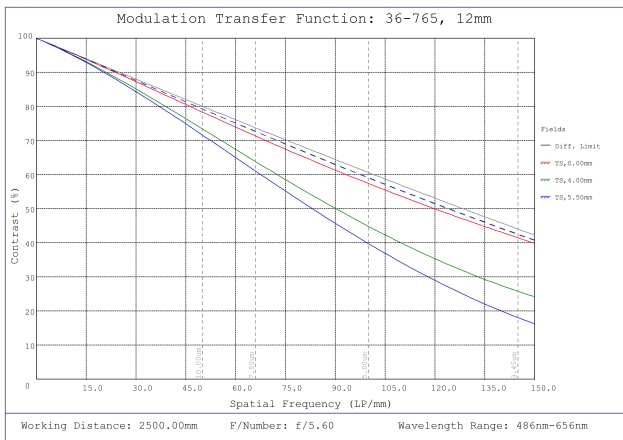
#36-765, 12mm f/5.6, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



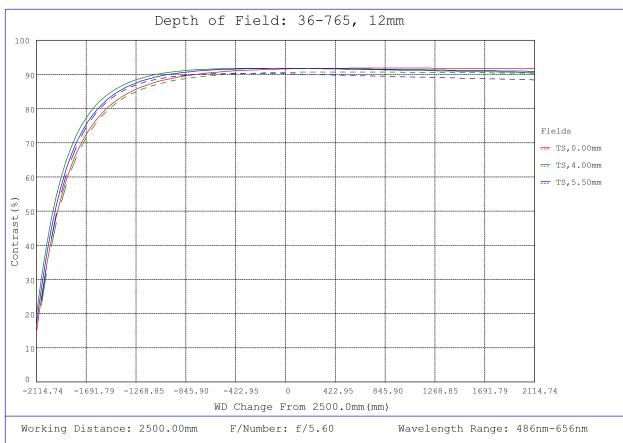
#36-765, 12mm f/5.6, 1000mm-∞ Primary WD, HRi Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 1000mm Working Distance, f5.6



#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