

[See all 25 Products in Family](#)

TECHSPEC®

12mm f/5.6, 400-2000mm Primary WD, HRi Series Fixed Focal Length Lens



12mm FL HPi Series Fixed Focal Length Lens



Stock **#36-764** 1 In Stock

-

1

+

A\$1,000<sup>.00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1+         | A\$1,000.00 each              |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

| General                          |              |
|----------------------------------|--------------|
| HRi Series                       | Series:      |
| Fixed Focal Length 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:<br>89.3mm - 41.7°                                                            |                                     |
| Field of View at Max Sensor Format:<br>Horizontal: 89.3mm - 41.7°<br>Vertical: 66.3mm - 31.6°<br>Diagonal: 113.1mm - 51.4° |                                     |
| Horizontal Field of View, 2/3" Sensor:<br>89.3mm - 41.7°                                                                   |                                     |
| Horizontal Field of View, 1/1.8" Sensor:<br>72.5mm - 34.4°                                                                 |                                     |
| Horizontal Field of View, 1/2" Sensor:<br>64.2mm - 30.7°                                                                   |                                     |
| Horizontal Field of View, 1/2.5" Sensor:<br>58.0mm - 27.9°                                                                 |                                     |
| Horizontal Field of View, 1/3" Sensor:<br>47.9mm - 23.1°                                                                   |                                     |
| Horizontal Field of View, 1/4" Sensor:<br>35.8mm - 17.4°                                                                   |                                     |
| 11.00                                                                                                                      | Maximum Image Circle (mm):          |
| 0.0088                                                                                                                     | 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:              |
| 17.52                                                                                                                      | Entrance Pupil Position (mm):       |
| 26.27                                                                                                                      | Object Space Principal Plane (mm):  |
| 2.90                                                                                                                       | Image Space Principal Plane (mm):   |
| -3.26                                                                                                                      | Maximum Distortion (%):             |
| -30.86                                                                                                                     | Exit Pupil Position (mm):           |
| 400 - 2000                                                                                                                 | Optimized Working Distance (mm):    |
| VIS                                                                                                                        | Lens Wavelength Range:              |

Sensor

|      |                        |
|------|------------------------|
| 2/3" | Maximum Sensor Format: |
| 1.85 | Pixel Size (µm):       |

Threading & Mounting

|                      |                |
|----------------------|----------------|
| M30.5 x0.50 (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

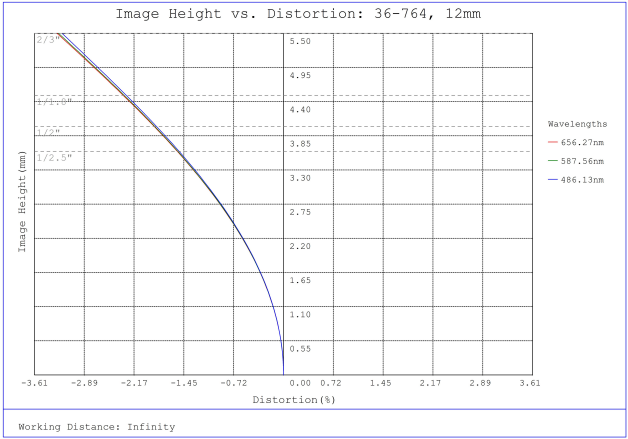
- 2/3", C-Mount Lens
- Up to 10 MegaPixels, 1.85µm Pixel Size Sensors
- Instrumentation (HRI) Versions of our HR Series Lenses with Streamlined Mechanical Designs and Fixed Apertures
- 8.5mm to 12mm Focal Length
- [Ruggedized \(HRr\) Designs](#) Also Available

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, HPi 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.

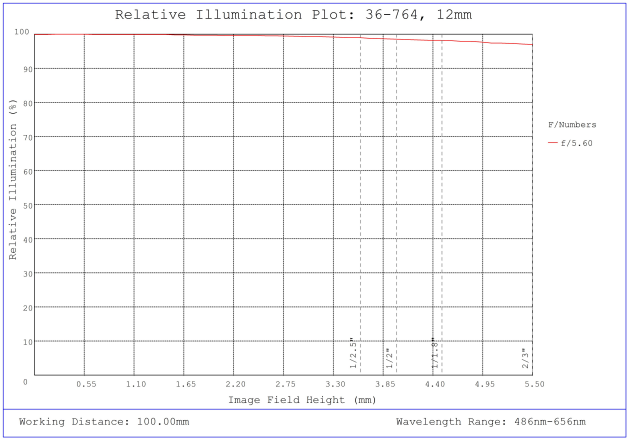
Edmund Optics has created a family of high performance optical designs (the HR Series family) and developed three customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the HR Series Lenses, providing the same optical performance in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

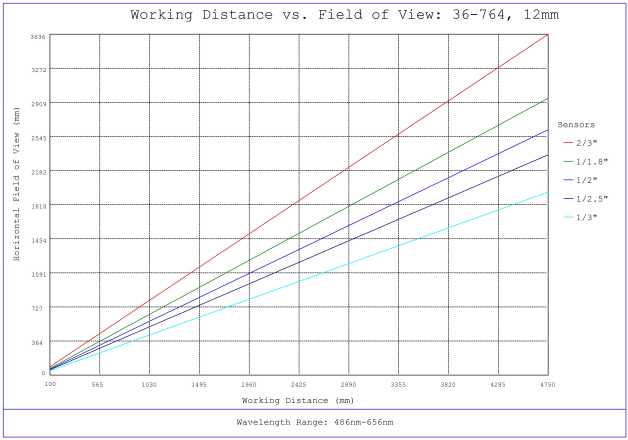
Technical Information



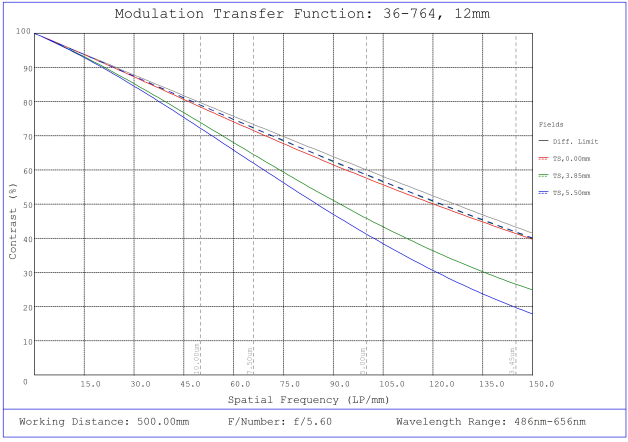
#36-764, 12mm f/5.6, 400-2000mm Primary WD, HRI Series Fixed Focal Length Lens, Distortion Plot



#36-764, 12mm f/5.6, 400-2000mm Primary WD, HRI Series Fixed Focal Length Lens, Relative Illumination Plot



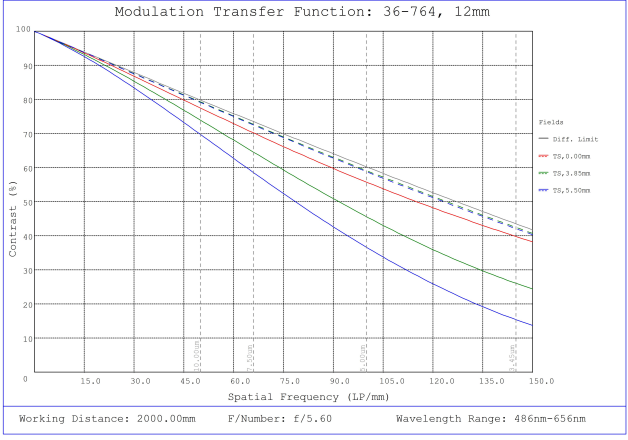
#36-764, 12mm f/5.6, 400-2000mm Primary WD, HRI Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



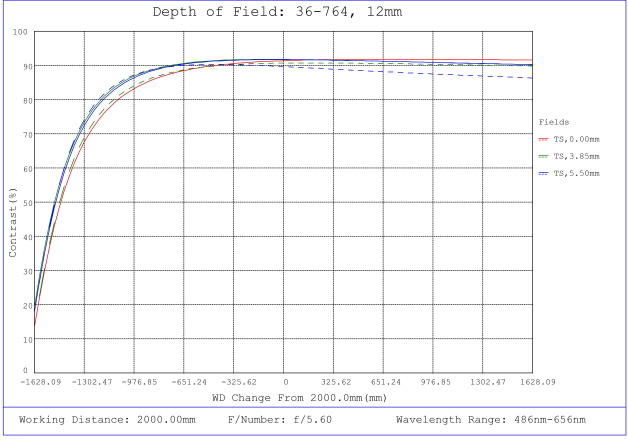
#36-764, 12mm f/5.6, 400-2000mm Primary WD, HRI Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 500mm Working Distance, f5.6



#36-764, 12mm f/5.6, 400-2000mm Primary WD, HRI Series Fixed Focal Length Lens, Depth of Field Plot, 500mm Working Distance, f5.6



#36-764, 12mm f/5.6, 400-2000mm Primary WD, HRI Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 2000mm Working Distance, f5.6



#36-764, 12mm f/5.6, 400-2000mm Primary WD, HRI Series Fixed Focal Length Lens, Depth of Field Plot, 2000mm Working Distance, f5.6

Compatible Cameras