

**TECHSPEC® 12mm, f/8 Ci Series Fixed Focal Length Lens**



12mm Focal Length

Stock **#86-611** **11 In Stock**

1  MRP ₹15,171

Price inclusive of all taxes

**ADD TO CART**

Volume Pricing

Qty 1-24	₹15,171 each
Qty 25+	₹13,659 each
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**General**

**Product Family:**  
Ci Series

**Type:**  
Fixed Focal Length Lens

**Physical & Mechanical Properties**

**Iris Option:**  
Fixed

29.00	Length (mm):
26.5	Maximum Diameter (mm):
26.5	Outer Diameter (mm):
31	Weight (g):
0.31	Maximum Rear Protrusion (mm):
26.50	Diameter (mm):

## Optical Properties

80.9mm - 41.2°	Horizontal Field of View @ Max Sensor Format:
Horizontal: 81.3mm - 41.2° Vertical: 60.5mm - 31.3° Diagonal: 102.3mm - 50.5°	Field of View at Max Sensor Format:
80.9mm - 41.2°	Horizontal Field of View, 2/3" Sensor:
65.8mm - 34.0°	Horizontal Field of View, 1/1.8" Sensor:
58.3mm - 30.4°	Horizontal Field of View, 1/2" Sensor:
52.8mm - 27.6°	Horizontal Field of View, 1/2.5" Sensor:
43.5mm - 22.9°	Horizontal Field of View, 1/3" Sensor:
32.6mm - 17.2°	Horizontal Field of View, 1/4" Sensor:
11.00	Maximum Image Circle (mm):
0.0066	Numerical Aperture NA, Object Side:
7 (7)	Number of Elements (Groups):
12.00	Focal Length FL (mm):
100 - ∞	Working Distance (mm):
f/8	Aperture (f#):
425 - 675nm BBAR	Coating:
425 - 675nm BBAR	Coating Specification:
11.01	Entrance Pupil Position (mm):
17.32	Object Space Principal Plane (mm):
1.98	Image Space Principal Plane (mm):
-2.09	Maximum Distortion (%):
-11.38	Exit Pupil Position (mm):
VIS	Lens Wavelength Range:

## Sensor

2/3"	Maximum Sensor Format:
2.74	Pixel Size (μm):

## Threading & Mounting

M25.5 x 0.50 (Male)	Filter Thread:
<a href="#">#89-941 (Required)</a>	Filter Thread Adapter:
M22.0 x 0.75 (Male)	Front Thread:

**Mount:**

C-Mount

**Environmental & Durability Factors****Storage Temperature (°C):****-20 to +60****Type of Ruggedization:**

Industrial (Fixed Aperture with Simplified Mechanics)

**Regulatory Compliance****RoHS 2015:****Compliant****Certificate of Conformance:****View****Reach 235:****Compliant****Country of Origin:**

China

**Imported By:**

Edmund Optics India Private Limited  
 267, Greystone Building, Second Floor,  
 6th Cross Rd, Binnamangala,  
 Stage 1, Indiranagar, Bengaluru,  
 Karnataka, India 560038  
 Phone: +91-80-6845 0000

**Product Details**

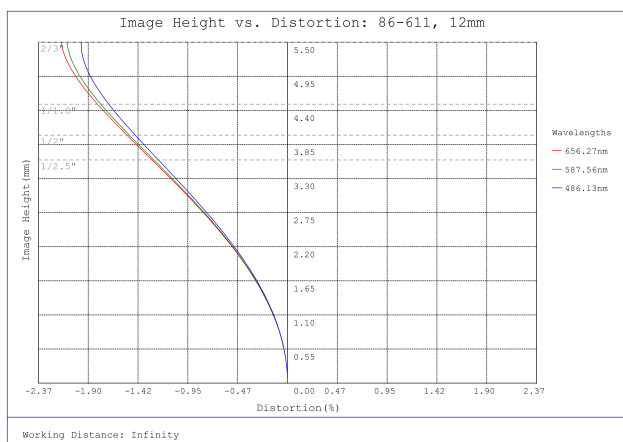
These compact lenses are designed specifically for volume integration into applications such as analytical medical devices, including benchtop-based blood analyzers. For customized *f*# versions to best suit your instrumentation application needs and to discuss volume requirements, please [contact us](#).

- Up to 2/3", C-Mount Lens
- Up to 7.5 MegaPixels, 2.8µm Pixel Size Sensors
- Instrumentation (Ci) Versions of our C Series Lenses with Streamlined Mechanical Designs and Fixed Apertures
- 3.5mm to 50mm Focal Length
- **Ruggedized (Cr) Designs** Also Available

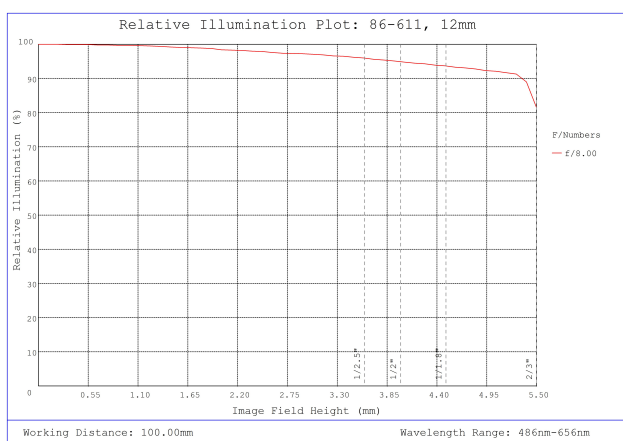
TECHSPEC® Ci Series Fixed Focal Length Lenses are a streamlined version of our C Series Fixed Focal Length Lenses. They feature the same low lens-to-lens variation and broadband anti-reflection (BBAR) coating for maximum light transmission, while offering reduced weight and size. An adjustable, lockable focus allows for setting and locking the best focus position for instrumentation integration. TECHSPEC® Ci Series Fixed Focal Length Lenses are designed specifically for volume integration into applications such as factory inspection and automation to benchtop biomedical devices. The Ci Series offers a wide range of aperture options, ensuring maximum flexibility of resolution, throughput, and depth of field.

Edmund Optics has created a family of high performance optical designs (the C Series family) and developed 6 customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the C Series lenses providing the same optical performance in a variety of optomechanical solutions to meet your application requirements:

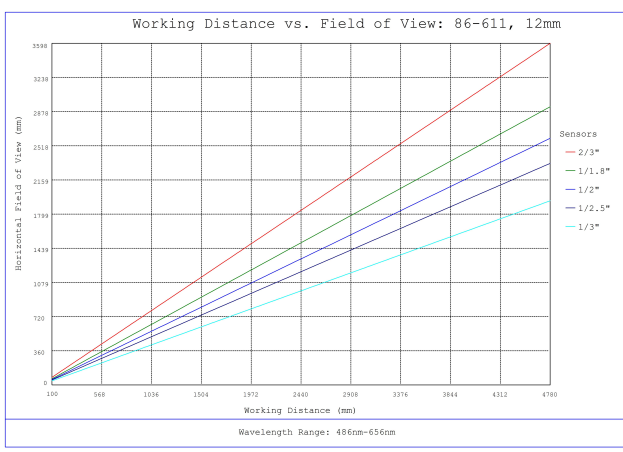
- **C Series:** Features locking cam focus and iris adjustment and is the most adjustable version of these optical designs; they are the typical high quality machine vision lenses. Also available with a **VIS-NIR Broadband Anti-Reflection (BBAR) Coating**.
- **Ci Series:** Simplified mechanics featuring fixed apertures with compact housing. **Industrial Ruggedization** for reduced size, cost, and locked focus.
- **Cr Series:** All optics glued in place and a locking C-clamp focus ring. **Stabilized Ruggedization** for reduced pixel shift and improved focus stability.
- **Cx Series:** Modular, flexible mechanics allows lenses to be taken apart for easy integration of accessories such as liquid lenses, apertures, and more.
- **Liquid Lens Cx Series:** Designed with an integrated liquid lens for quick autofocus.
- **Cw Series:** Waterproof, designed to meet IEC **Ingress Protection** Code IPX7 and IPX9K.

**Technical Information**

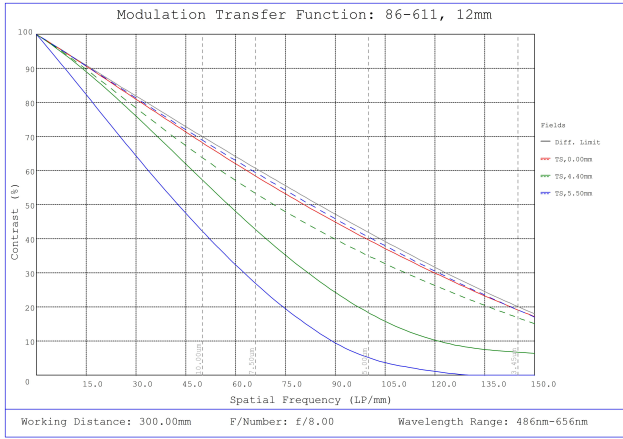
#86-611, 12mm, f/8 Ci Series Fixed Focal Length Lens, Distortion Plot



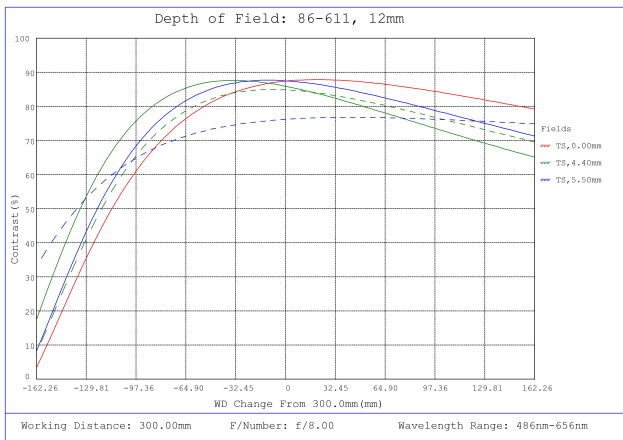
#86-611, 12mm, f/8 Ci Series Fixed Focal Length Lens, Relative Illumination Plot



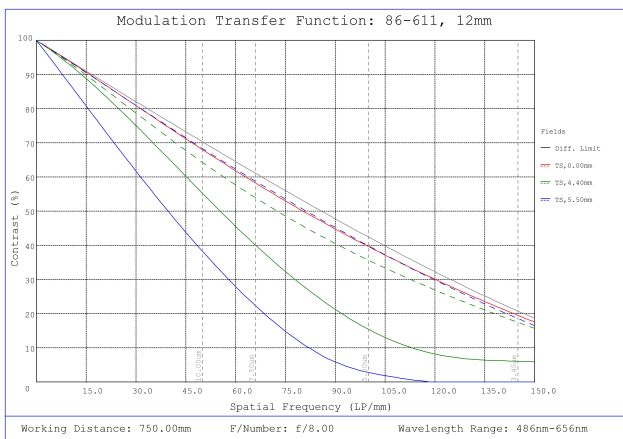
#86-611, 12mm, f/8 Ci Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



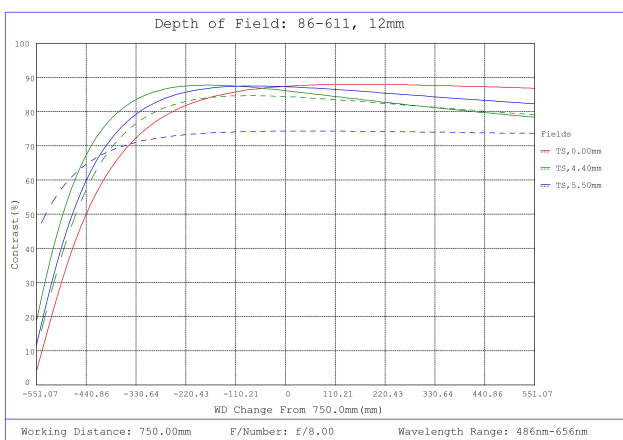
#86-611, 12mm, f/8 Ci Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 300mm Working Distance, f8



#86-611, 12mm, f/8 Ci Series Fixed Focal Length Lens, Depth of Field Plot, 300mm Working Distance, f8



#86-611, 12mm, f/8 Ci Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 750mm Working Distance, f8



#86-611, 12mm, f/8 Ci Series Fixed Focal Length Lens, Depth of Field Plot, 750mm Working Distance, f8

Focal Length	A	B	C	D
6mm	M34.0 x 0.5	47.8mm	34mm	1.17mm
12mm	M22.0 x 0.75	29.0mm	22mm	0.96mm
16mm	M22.0 x 0.75	40.8mm	22mm	1.09mm
25mm	M22.0 x 0.75	29.9mm	22mm	1.33mm
35mm	M25.5 x 0.5	41mm	22.5mm	3.82mm
50mm	M30.5 x 0.5	49.5mm	30.5mm	2.06mm



## Compatible Cameras