

TECHSPEC<sup>®</sup> 35mm, f/16 Ci Series Fixed Focal Length Lens



35mm Focal Length

Stock **#85-338** 20+ In Stock

-

1

+

€215<sup>00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-24       | €215,00 each                  |
| Qty 25+        | €194,00 each                  |
| Need More?     | <a href="#">Request Quote</a> |

🔔 Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Ci Series

Product Family:

Fixed Focal Length Lens

Type:

Physical & Mechanical Properties

Fixed

Iris Option:

|       |                               |
|-------|-------------------------------|
| 41.00 | Length (mm):                  |
| 26.5  | Maximum Diameter (mm):        |
| 26.5  | Outer Diameter (mm):          |
| 45    | Weight (g):                   |
| 0.18  | Maximum Rear Protrusion (mm): |
| 26.50 | Diameter (mm):                |

Optical Properties

|                                                                                                                           |  |
|---------------------------------------------------------------------------------------------------------------------------|--|
| Horizontal Field of View @ Max Sensor Format:<br>22.1mm - 14.3°                                                           |  |
| Field of View at Max Sensor Format:<br>Horizontal: 22.1mm - 14.3°<br>Vertical: 16.6mm - 10.7°<br>Diagonal: 27.7mm - 17.8° |  |
| Horizontal Field of View, 2/3" Sensor:<br>22.1mm - 14.3°                                                                  |  |
| Horizontal Field of View, 1/1.8" Sensor:<br>18.1mm - 11.7°                                                                |  |
| Horizontal Field of View, 1/2" Sensor:<br>16.1mm - 10.4°                                                                  |  |
| Horizontal Field of View, 1/2.5" Sensor:<br>14.6mm - 9.4°                                                                 |  |
| Horizontal Field of View, 1/3" Sensor:<br>12.0mm - 7.8°                                                                   |  |
| Horizontal Field of View, 1/4" Sensor:<br>9.0mm - 5.9°                                                                    |  |
| Maximum Image Circle (mm):<br>11.00                                                                                       |  |
| Numerical Aperture NA, Object Side:<br>0.009                                                                              |  |
| Number of Elements (Groups):<br>7 (6)                                                                                     |  |
| Focal Length FL (mm):<br>35.00                                                                                            |  |
| Working Distance (mm):<br>100 - ∞                                                                                         |  |
| Aperture (f/#):<br>f/16                                                                                                   |  |
| Coating:<br>425 - 675nm BBAR                                                                                              |  |
| Coating Specification:<br>425 - 675nm BBAR                                                                                |  |
| Entrance Pupil Position (mm):<br>21.27                                                                                    |  |
| Object Space Principal Plane (mm):<br>22.42                                                                               |  |
| Image Space Principal Plane (mm):<br>-20.67                                                                               |  |
| Maximum Distortion (%):<br>0.17                                                                                           |  |
| Exit Pupil Position (mm):<br>-21.87                                                                                       |  |
| Lens Wavelength Range:<br>VIS                                                                                             |  |

Sensor

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

Threading & Mounting

|                    |                        |
|--------------------|------------------------|
| M25.5 x0.50 (Male) | Filter Thread:         |
| #89-942 (Required) | Filter Thread Adapter: |
| M25.5 x0.5 (Male)  | Front Thread:          |

|                                                       |                             |
|-------------------------------------------------------|-----------------------------|
| C-Mount                                               | Mount:                      |
| Environmental & Durability Factors                    |                             |
| -20 to +60                                            | Storage Temperature (°C):   |
| Industrial (Fixed Aperture with Simplified Mechanics) | Type of Ruggedization:      |
| Regulatory Compliance                                 |                             |
| Compliant                                             | RoHS 2015:                  |
| View                                                  | Certificate of Conformance: |
| Compliant                                             | Reach 235:                  |

## 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](#).

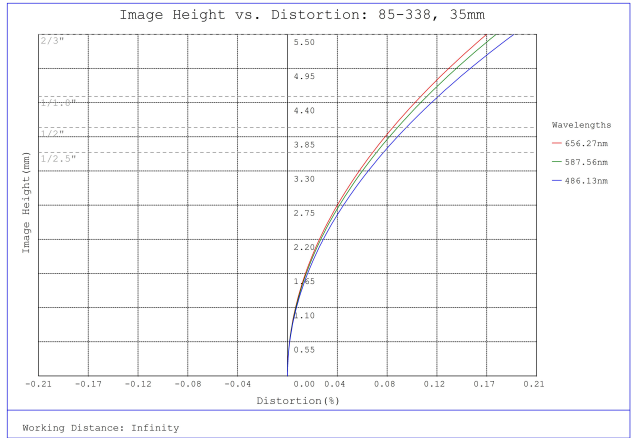
- Up to 2/3", C-Mount Lens
- Up to 7.5 MegaPixels, 2.8µm Pixel Size Sensors
- Instrumentation (Ci) Versions of our C Series Lenses with Streamlined Mechanical Designs and Fixed Apertures
- 3.5mm to 50mm Focal Length
- [Ruggedized \(Cr\) Designs](#) Also Available

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.

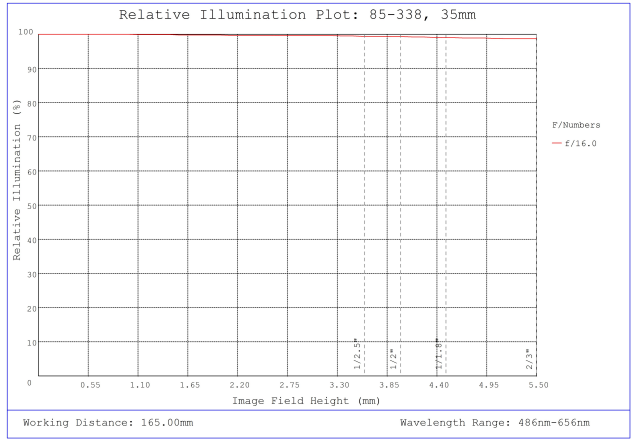
Edmund Optics has created a family of high performance optical designs (the C Series family) and developed 6 customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the C Series lenses providing the same optical performance in a variety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

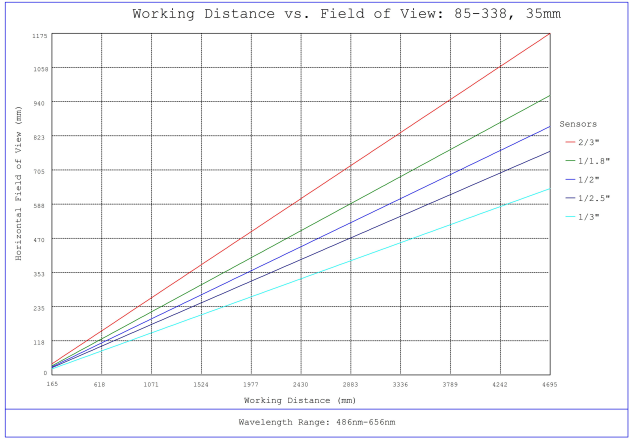
## Technical Information



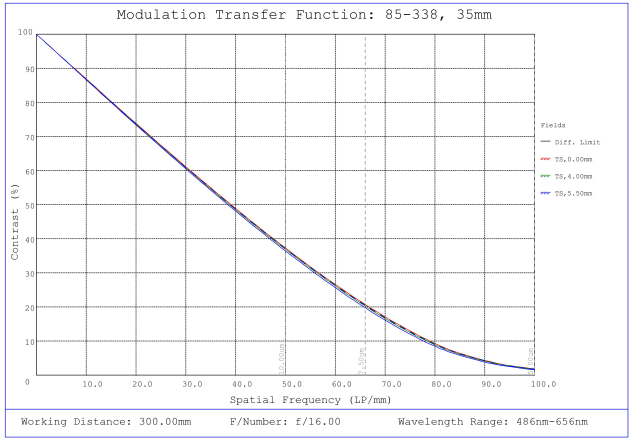
#85-338, 35mm, f/16 Ci Series Fixed Focal Length Lens, Distortion Plot



#85-338, 35mm, f/16 Ci Series Fixed Focal Length Lens, Relative Illumination Plot



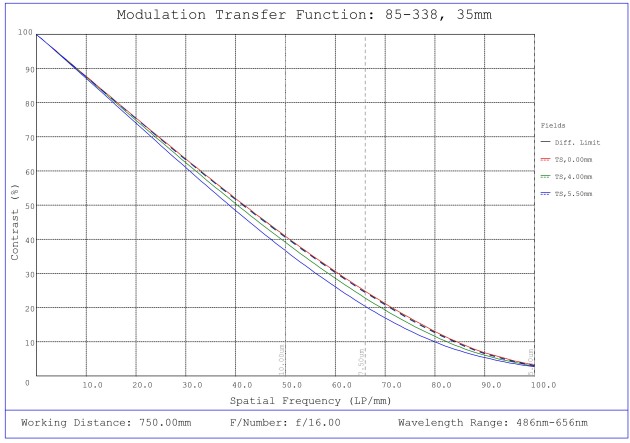
#85-338, 35mm, f/16 Ci Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



#85-338, 35mm, f/16 Ci Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 300mm Working Distance, f16



#85-338, 35mm, f/16 Ci Series Fixed Focal Length Lens, Depth of Field Plot, 300mm Working Distance, f16



#85-338, 35mm, f/16 Ci Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 750mm Working Distance, f16



#85-338, 35mm, f/16 Ci Series Fixed Focal Length Lens, Depth of Field Plot, 750mm Working Distance, f16

| Focal Length | A           | B      | C      | D      |
|--------------|-------------|--------|--------|--------|
| 6mm          | M34.0 x0.5  | 47.8mm | 34mm   | 1.17mm |
| 12mm         | M22.0 x0.75 | 29.0mm | 22mm   | 0.96mm |
| 16mm         | M22.0 x0.75 | 40.8mm | 22mm   | 1.09mm |
| 25mm         | M22.0 x0.75 | 29.9mm | 22mm   | 1.33mm |
| 35mm         | M25.5 x0.5  | 41mm   | 22.5mm | 3.82mm |
| 50mm         | M30.5 x0.5  | 49.5mm | 30.5mm | 2.06mm |



## Compatible Cameras