

TECHSPEC<sup>®</sup> 6mm, f/5.6 Ci Series Fixed Focal Length Lens



6mm Focal Length

Stock #86-595 15 In Stock

-

1

+

₹17,835

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| Volume Pricing |                               |
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| Qty 1+         | ₹17,835 each                  |
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Product Downloads

| General                          |              |
|----------------------------------|--------------|
| Ci Series                        | Series:      |
| Fixed Focal Length Lens          | Type:        |
| Physical & Mechanical Properties |              |
| Fixed                            | Iris Option: |
| 47.80                            | Length (mm): |

|       |                               |
|-------|-------------------------------|
| 34    | Maximum Diameter (mm):        |
| 34    | Outer Diameter (mm):          |
| 64    | Weight (g):                   |
| 1.17  | Maximum Rear Protrusion (mm): |
| 26.50 | Diameter (mm):                |

Optical Properties

|                                                                                  |                                               |
|----------------------------------------------------------------------------------|-----------------------------------------------|
| 110.2mm - 62.1°                                                                  | Horizontal Field of View @ Max Sensor Format: |
| Horizontal: 110mm - 62.1°<br>Vertical: 80.4mm - 47.8°<br>Diagonal: 141.9mm - 75° | Field of View at Max Sensor Format:           |
| 110.2mm - 62.1°                                                                  | Horizontal Field of View, 1/1.8" Sensor:      |
| 96.8mm - 55.9°                                                                   | Horizontal Field of View, 1/2" Sensor:        |
| 86.9mm - 51.0°                                                                   | Horizontal Field of View, 1/2.5" Sensor:      |
| 71.0mm - 42.7°                                                                   | Horizontal Field of View, 1/3" Sensor:        |
| 52.6mm - 32.4°                                                                   | Horizontal Field of View, 1/4" Sensor:        |
| 9.00                                                                             | Maximum Image Circle (mm):                    |
| 0.0062                                                                           | Numerical Aperture NA, Object Side:           |
| 9 (7)                                                                            | Number of Elements (Groups):                  |
| 6.00                                                                             | Focal Length FL (mm):                         |
| 75 - ∞                                                                           | Working Distance (mm):                        |
| f/5.6                                                                            | Aperture (f/#):                               |
| 425 - 675nm BBAR                                                                 | Coating:                                      |
| 425 - 675nm BBAR                                                                 | Coating Specification:                        |
| 16.08                                                                            | Entrance Pupil Position (mm):                 |
| 21.35                                                                            | Object Space Principal Plane (mm):            |
| 6.60                                                                             | Image Space Principal Plane (mm):             |
| -6.82                                                                            | Maximum Distortion (%):                       |
| -25.52                                                                           | Exit Pupil Position (mm):                     |
| VIS                                                                              | Lens Wavelength Range:                        |

Sensor

|        |                        |
|--------|------------------------|
| 1/1.8" | Maximum Sensor Format: |
| 2.74   | Pixel Size (µm):       |

Threading & Mounting

|                    |                        |
|--------------------|------------------------|
| M43 x0.75 (Female) | Filter Thread:         |
| #89-940 (Required) | Filter Thread Adapter: |
| M34.0 x0.5 (Male)  | Front Thread:          |
| C-Mount            | Mount:                 |

Environmental & Durability Factors

|  |                           |
|--|---------------------------|
|  | Storage Temperature (°C): |
|--|---------------------------|

Type of Ruggedization:  
Industrial (Fixed Aperture with Simplified Mechanics)

Regulatory Compliance

CompliantRoHS 2015:

CompliantREACH 201:

ViewCertificate of Conformance:

ChinaCountry of Origin:

Edmund Optics India Private LimitedImported By:

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](#).

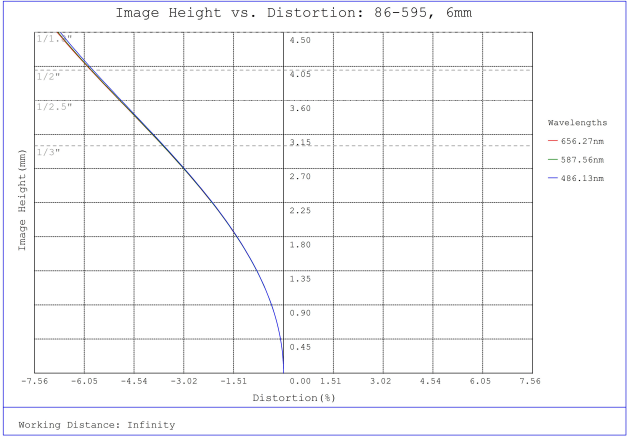
- Up to 2/3", C-Mount Lens
- Up to 7.5 MegaPixels, 2.8µm Pixel Size Sensors
- Instrumentation (Ci) Versions of our C Series Lenses with Streamlined Mechanical Designs and Fixed Apertures
- 3.5mm to 50mm Focal Length
- [Ruggedized \(Cr\) Designs](#) Also Available

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.

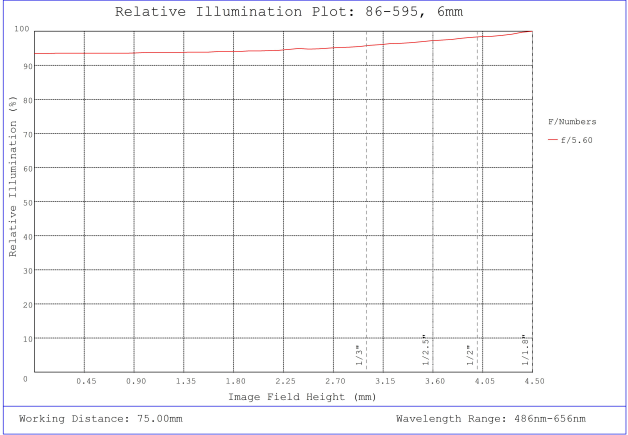
Edmund Optics has created a family of high performance optical designs (the C Series family) and developed 6 customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the C Series lenses providing the same optical performance in a variety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

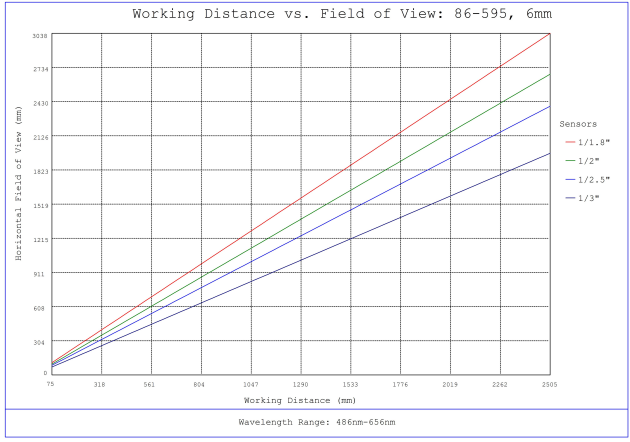
Technical Information



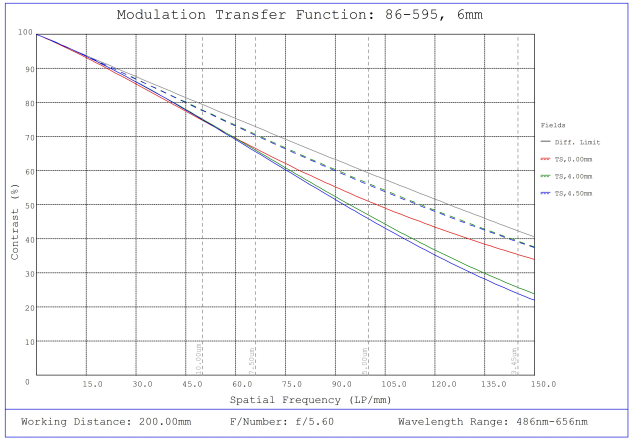
#86-595, 6mm, f/5.6 Ci Series Fixed Focal Length Lens, Distortion Plot



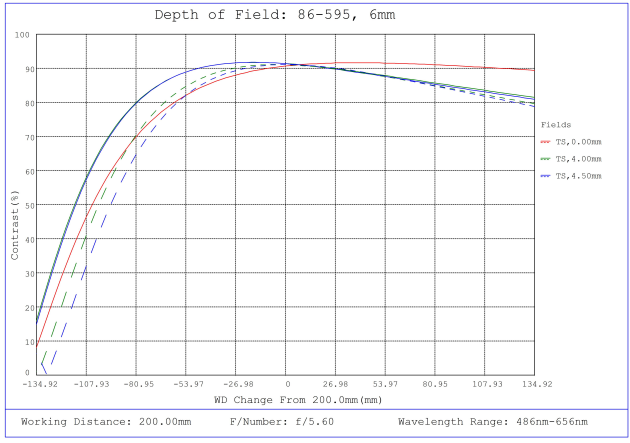
#86-595, 6mm, f/5.6 Ci Series Fixed Focal Length Lens, Relative Illumination Plot



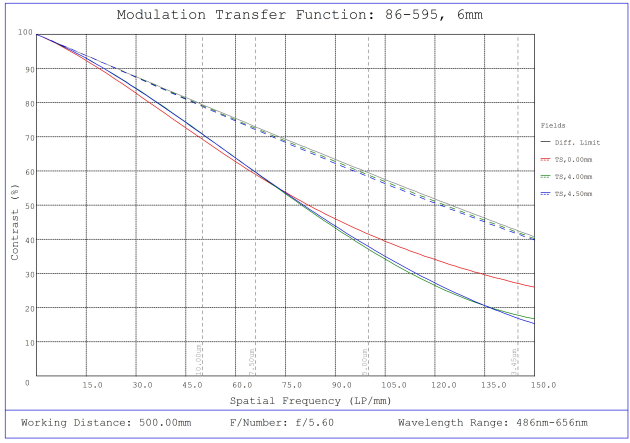
#86-595, 6mm, f/5.6 Ci Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



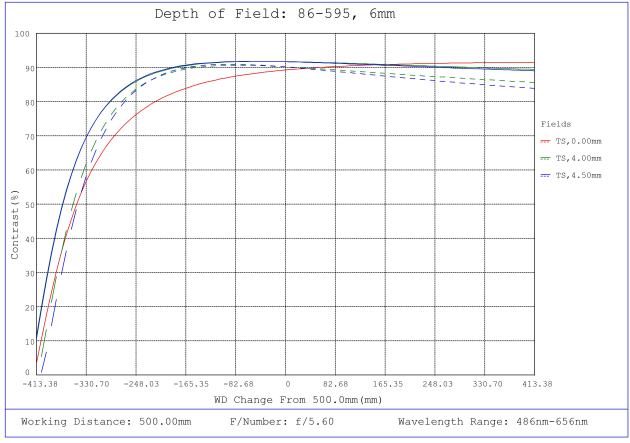
#86-595, 6mm, f/5.6 Ci Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 200mm Working Distance, f5.6



#86-595, 6mm, f/5.6 Ci Series Fixed Focal Length Lens, Depth of Field Plot, 200mm Working Distance, f5.6

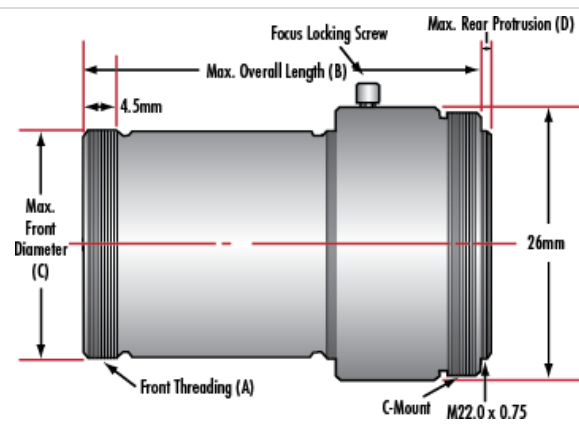


#86-595, 6mm, f/5.6 Ci Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 500mm Working Distance, f5.6



#86-595, 6mm, f/5.6 Ci Series Fixed Focal Length Lens, Depth of Field Plot, 500mm Working Distance, f5.6

| 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