

TECHSPEC[®] 50mm, f/2.8 Cr Series Fixed Focal Length Lens



50mm Cr Series Fixed Focal Length Lens



Stock **#35-191** 4 In Stock

-

1

+

£330^{.00}

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Volume Pricing	
Qty 1+	£330.00 each
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i Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Cr Series

Series:

Fixed Focal Length Lens

Type:

Physical & Mechanical Properties

Iris Option:

Fixed	
48.42	Length (mm):
33.8	Maximum Diameter (mm):
33.8	Outer Diameter (mm):
83	Weight (g):
2.06	Maximum Rear Protrusion (mm):
33.80	Diameter (mm):

Optical Properties	
Horizontal Field of View @ Max Sensor Format: 42.8mm - 10.0°	
Field of View at Max Sensor Format: Horizontal: 42.7mm - 10° Vertical: 32mm - 7.5° Diagonal: 53.5mm - 12.5°	
Horizontal Field of View, 2/3" Sensor: 42.8mm - 10.0°	
Horizontal Field of View, 1/1.8" Sensor: 35.0mm - 8.2°	
Horizontal Field of View, 1/2" Sensor: 31.1mm - 7.3°	
Horizontal Field of View, 1/2.5" Sensor: 28.2mm - 6.6°	
Horizontal Field of View, 1/3" Sensor: 23.3mm - 5.5°	
Horizontal Field of View, 1/4" Sensor: 17.5mm - 4.1°	
11.00	Maximum Image Circle (mm):
0.031	Numerical Aperture NA, Object Side:
6 (4)	Number of Elements (Groups):
50.00	Focal Length FL (mm):
250 - ∞	Working Distance (mm):
f/2.8	Aperture (f/#):
425 - 675nm BBAR	Coating:
425 - 675nm BBAR	Coating Specification:
35.62	Entrance Pupil Position (mm):
39.89	Object Space Principal Plane (mm):
-36.26	Image Space Principal Plane (mm):
0.26	Maximum Distortion (%):
-40.93	Exit Pupil Position (mm):
VIS	Lens Wavelength Range:

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

Threading & Mounting	
M30.5 x0.50 (Male)	Filter Thread:
M30.5 x0.5 (Male)	Front Thread:
C-Mount	Mount:

Environmental & Durability Factors

[illegible]

Vibration)

Regulatory Compliance	
GDPR Compliance	2023-10-26
ISO 27001 Audit	2023-11-05
Financial Reporting	2023-11-15
Environmental Impact	2023-11-20
Health & Safety	2023-11-25
Anti-Money Laundering	2023-12-01
Consumer Protection	2023-12-05
Product Liability	2023-12-10
Intellectual Property	2023-12-15
Export Controls	2023-12-20
Sanctions Screening	2023-12-25
Anti-Corruption	2024-01-01
Whistleblower Policy	2024-01-05
Record Retention	2024-01-10
Disaster Recovery	2024-01-15
Business Continuity	2024-01-20
Insurance Coverage	2024-01-25
Legal Counsel	2024-02-01
Regulatory Updates	2024-02-05
Compliance Training	2024-02-10
Internal Controls	2024-02-15
External Audits	2024-02-20
Regulatory Filings	2024-02-25
Public Disclosure	2024-03-01
Stakeholder Engagement	2024-03-05
Investor Relations	2024-03-10
Media Relations	2024-03-15
Community Outreach	2024-03-20
Government Relations	2024-03-25
Industry Associations	2024-04-01
Trade Shows	2024-04-05
Networking Events	2024-04-10
Charitable Contributions	2024-04-15
Philanthropy	2024-04-20
Corporate Social Responsibility	2024-04-25
Environmental Sustainability	2024-05-01
Social Sustainability	2024-05-05
Human Rights	2024-05-10
Anti-Discrimination	2024-05-15
Equal Opportunity	2024-05-20
Employee Relations	2024-05-25
Union Relations	2024-06-01
Labor Laws	2024-06-05
Immigration	2024-06-10
Visa Sponsorship	2024-06-15
Work Permits	2024-06-20
Employment Contracts	2024-06-25
Termination Procedures	2024-07-01
Dispute Resolution	2024-07-05
Mediation	2024-07-10
Arbitration	2024-07-15
Litigation	2024-07-20
Settlements	2024-07-25
Legal Fees	2024-08-01
Pro Bono Work	2024-08-05
Legal Research	2024-08-10
Legal Writing	2024-08-15
Legal Analysis	2024-08-20
Legal Opinion	2024-08-25
Legal Advice	2024-09-01
Legal Consultation	2024-09-05
Legal Representation	2024-09-10
Legal Counsel	2024-09-15
Legal Services	2024-09-20
Legal Products	2024-09-25
Legal Solutions	2024-10-01
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Legal Products	

[View](#) **Certificate of Conformance:**

Product Details

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

TECHSPEC® Compact Ruggedized (Cr) Series Fixed Focal Length Lenses provide Stabilized Ruggedization, protecting the lens from damage while maintaining optical pointing and positioning after shock and vibration. All individual lens elements are glued in place to reduce object shift on the image. In addition, these lenses feature robust mechanics with a simplified focus and stainless steel locking C-Mount clamp. TECHSPEC® Cr Series Fixed Focal Length Lenses are ideal for calibrated imaging systems such as measurement and gauging, 3D stereo vision, robotics and sensing, autonomous vehicles, and object tracking. The object to image mapping is maintained even after heavy shock and vibration; if the center of the object maps onto the center pixel, it will always map to that same center pixel.

These lenses won the [1st place 2018 Inspect Award](#) and the [Silver Level 2018 Innovators Award](#).

Note: To learn more about ruggedization, visit our [Ruggedization Resource Webpage](#).

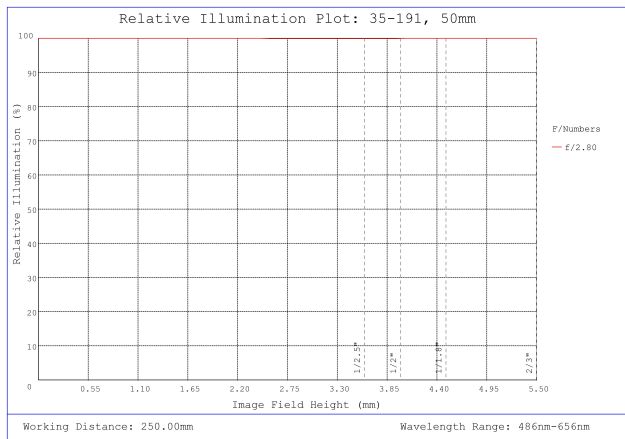
Edmund Optics has created a family of high performance optical designs (the C Series family) and developed 6 customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the C Series lenses providing the same optical performance in a variety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

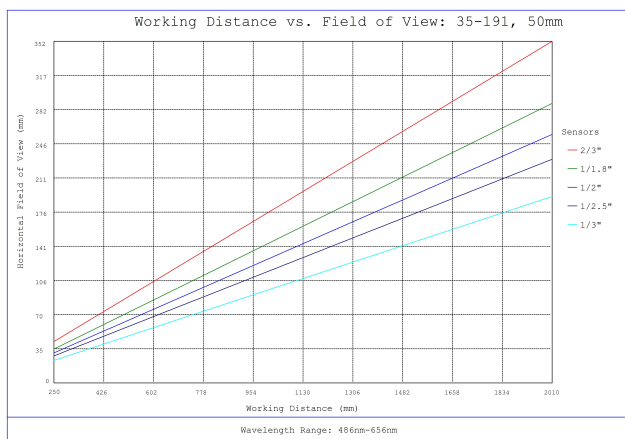
Technical Information



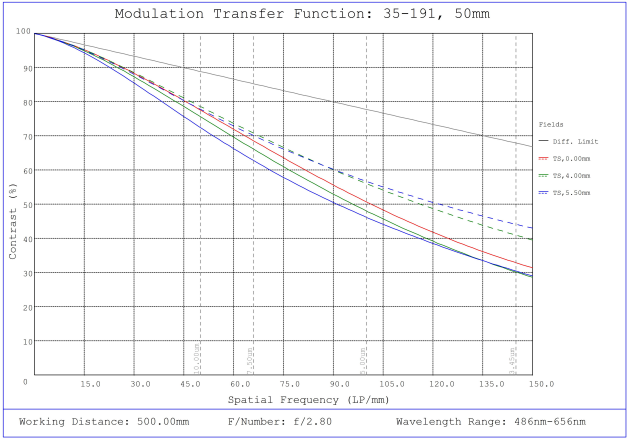
#35-191, 50mm, f/2.8 Cr Series Fixed Focal Length Lens, Distortion Plot



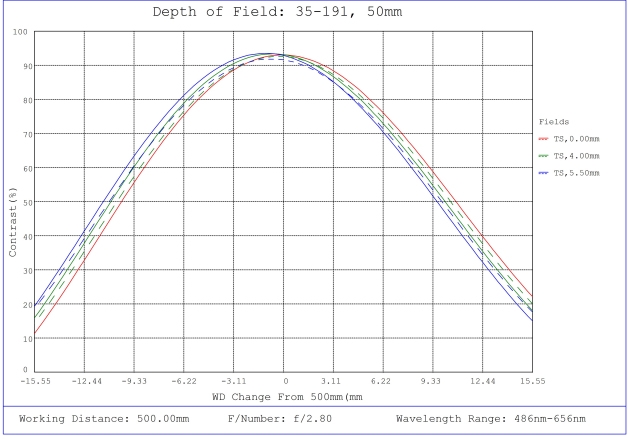
#35-191, 50mm, f/2.8 Cr Series Fixed Focal Length Lens, Relative Illumination Plot



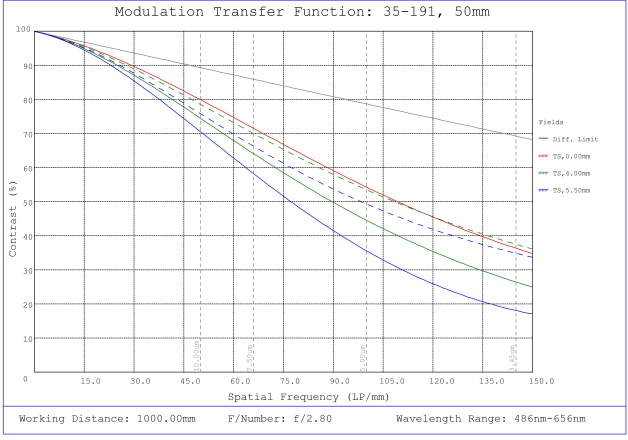
#35-191, 50mm, f/2.8 Cr Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



#35-191, 50mm, f/2.8 Cr Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 500mm Working Distance, f2.8



#35-191, 50mm, f/2.8 Cr Series Fixed Focal Length Lens, Depth of Field Plot, 500mm Working Distance, f2.8



#35-191, 50mm, f/2.8 Cr Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 1000mm Working Distance, f2.8



#35-191, 50mm, f/2.8 Cr Series Fixed Focal Length Lens, Depth of Field Plot, 1000mm Working Distance, f2.8

Compatible Cameras