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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

+

€410^{.00}

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Volume Pricing	
Qty 1+	€410,00 each
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i Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Cr Series	Product Family:
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

	Storage Temperature (°C): -20 to +60
	Type of Ruggedization: Stabilized (Robust Mechanics for Shock and Vibration)

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 Safety	2023-12-10
Supply Chain Management	2023-12-15
Intellectual Property	2023-12-20
Insurance Policies	2023-12-25
Legal Counsel	2023-12-30
Compliance Training	2024-01-05
Regulatory Updates	2024-01-10
Internal Controls	2024-01-15
External Audits	2024-01-20
Documentation Review	2024-01-25
Policy Updates	2024-02-01
Incident Response	2024-02-05
Business Continuity	2024-02-10
Disaster Recovery	2024-02-15
Security Measures	2024-02-20
Access Control	2024-02-25
Encryption Standards	2024-03-01
Network Security	2024-03-05
System Updates	2024-03-10
Hardware Maintenance	2024-03-15
Software Licenses	2024-03-20
Vendor Management	2024-03-25
Contract Reviews	2024-04-01
Performance Metrics	2024-04-05
Customer Satisfaction	2024-04-10
Employee Engagement	2024-04-15
Training Programs	2024-04-20
Performance Reviews	2024-04-25
Goal Setting	2024-05-01
Strategic Planning	2024-05-05
Market Research	2024-05-10
Competitor Analysis	2024-05-15
Product Development	2024-05-20
Marketing Campaigns	2024-05-25
Sales Strategies	2024-06-01
Customer Support	2024-06-05
Feedback Mechanisms	2024-06-10
Quality Assurance	2024-06-15
Process Improvements	2024-06-20
Automation Tools	2024-06-25
Integration Projects	2024-07-01
System Downtime	2024-07-05
Uptime Guarantees	2024-07-10
Service Level Agreements	2024-07-15
SLA Monitoring	2024-07-20
Incident Resolution	2024-07-25
Root Cause Analysis	2024-08-01
Preventive Measures	2024-08-05
Post-Mortem Reports	2024-08-10
Lessons Learned	2024-08-15
Continuous Improvement	2024-08-20
Documentation Updates	2024-08-25
Policy Revisions	2024-09-01
Compliance Checks	2024-09-05
Regulatory Filings	2024-09-10
Annual Reports	2024-09-15
Stakeholder Communications	2024-09-20
Press Releases	2024-09-25
Media Relations	2024-10-01
Public Relations	2024-10-05
Brand Management	2024-10-10
Marketing Budget	2024-10-15
Sales Forecast	2024-10-20
Revenue Projections	2024-10-25
Profitability Analysis	2024-11-01
Cost Reduction	2024-11-05
Resource Allocation	2024-11-10
Team Structure	2024-11-15
Organizational Chart	2024-11-20
Job Descriptions	2024-11-25
Recruitment Process	2024-12-01
Onboarding Program	2024-12-05
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[View](#) **Certificate of Conformance:**

- 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.

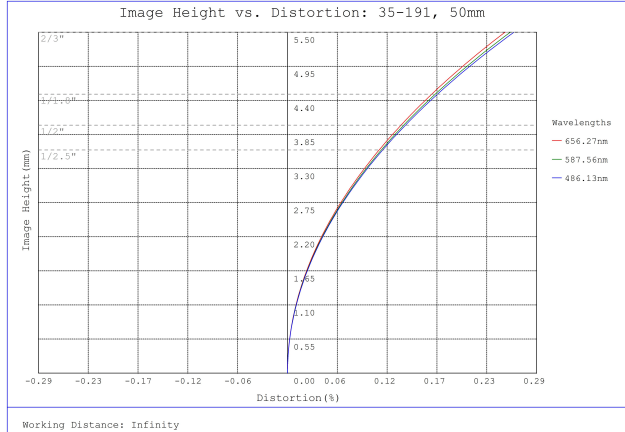
These lenses won the **1st place 2018 Inspect Award** and the **Silver Level 2018 Innovators Award**.

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

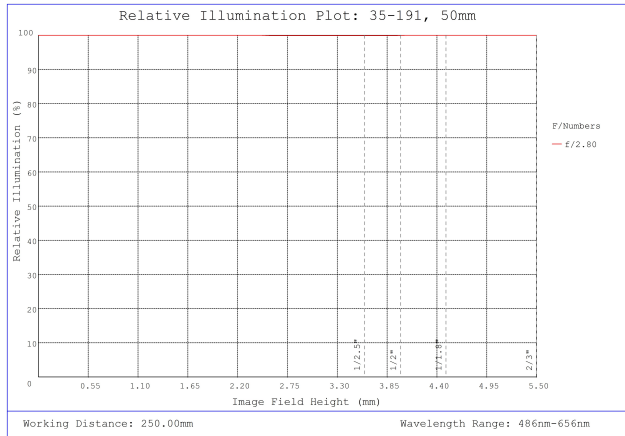
Edmund Optics has created a family of high performance optical designs (the C Series family) and developed 6 customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the C Series lenses providing the same optical performance in a variety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

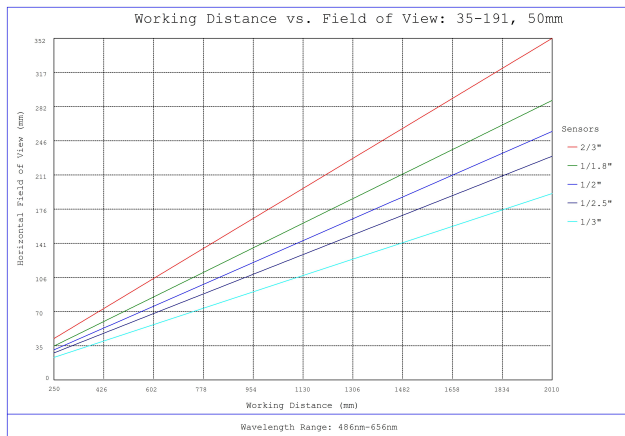
Technical Information



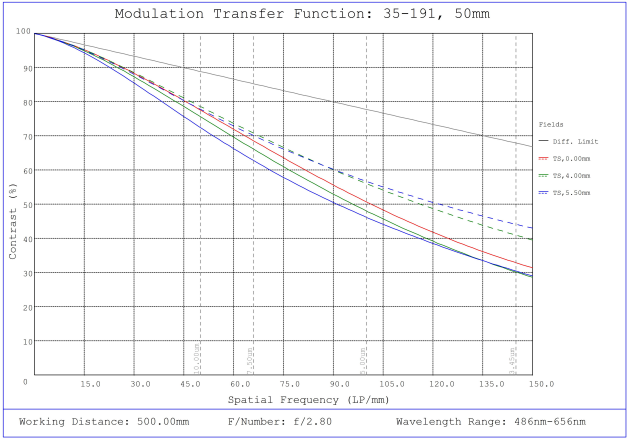
#35-191, 50mm, f/2.8 Cr Series Fixed Focal Length Lens, Distortion Plot



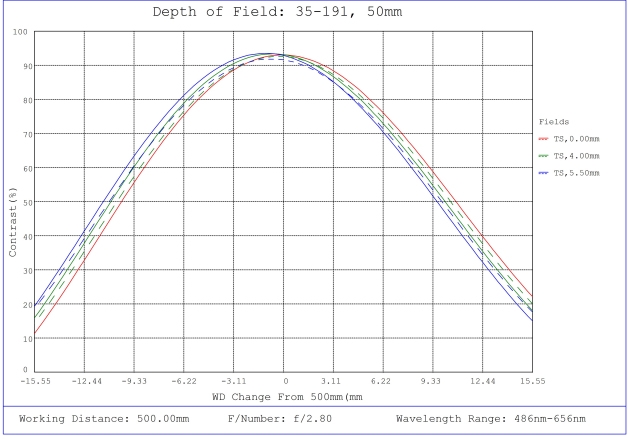
#35-191, 50mm, f/2.8 Cr Series Fixed Focal Length Lens, Relative Illumination Plot



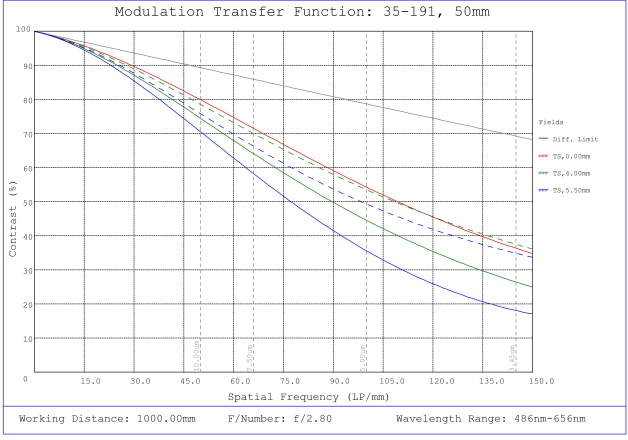
#35-191, 50mm, f/2.8 Cr Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



#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