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TECHSPEC® 3.5mm f/11 Sealed Cw Series Fixed Focal Length Lens

3.5mm Focal Length

Stock **#15-612** **20+ In Stock**

- 1 + **C$987**.00

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General

Series:
Cw Series

Note:
C-Mount compatible with O-ring 25mm ID x 2mm

Type:
Fixed Focal Length Lens

Physical & Mechanical Properties

Iris Option:
Fixed

Length (mm):
41.96

Maximum Diameter (mm):
65.00

Outer Diameter (mm):
65

Maximum Rear Protrusion (mm):
2.7

Optical Properties

Field of View at Max Sensor Format:
Horizontal: 102.34°
Vertical: 82.28°
Diagonal: 116.98°

Horizontal Field of View, 1/1.8" Sensor:
102.34°

Horizontal Field of View, 1/2" Sensor:
94.13°

Horizontal Field of View, 1/2.5" Sensor:
86.75°

Horizontal Field of View, 1/3" Sensor:
74.44°

Maximum Image Circle (mm):
9.00

Numerical Aperture NA, Object Side:
0.013

Number of Elements (Groups):
10 (9)

Focal Length FL (mm):
3.50

Working Distance (mm):
75 - ∞

Aperture (f/#):
f/11

Coating Specification:
425 - 675nm BBAR

Entrance Pupil Position (mm):
34.70

Object Space Principal Plane (mm):
-22.37

Image Space Principal Plane (mm):
32.70

Maximum Distortion (%):
21.12

Exit Pupil Position (mm):
-15.89

Lens Wavelength Range:
VIS

Sensor

Maximum Sensor Format:
1/1.8"

Pixel Size (µm):
2.74

Threading & Mounting

Filter Thread:
M62 x 0.75 (Female)

Mount:
C-Mount

Environmental & Durability Factors

Environmental Rating:
IPX7

Type of Ruggedization:
Waterproof (IPX7)

Regulatory Compliance

Certificate of Conformance:
View

Product Details

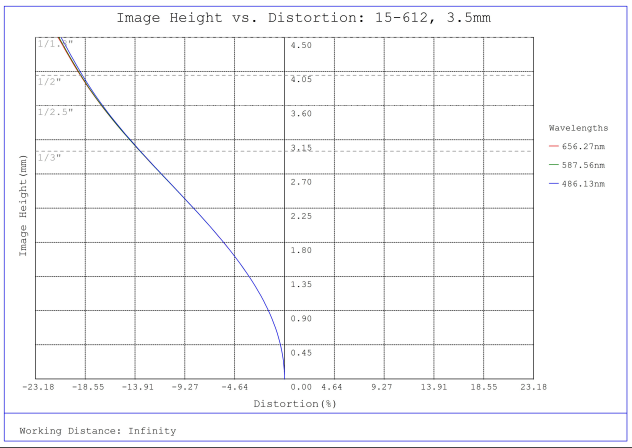
- Up to 2/3", C-Mount Lens
- Waterproof (Cw) Versions of C Series Fixed Focal Length Lenses
- Meets IEC Ingress Protection Ratings of IPX7 and IPX9K
- Designed to Eliminate the Need for a Protective Lens Cover

TECHSPEC® Cw Series Fixed Focal Length Lenses are waterproof versions of our **TECHSPEC® C Series Fixed Focal Length Lenses**. Designed to meet IEC Ingress Protection Codes IPX7 and IPX9K, these lenses withstand exposure to water up to 1 meter depth for 30 minutes and operate in close-range high pressure, high temperature water spray downs with the exception of all 3.5 and 4.5mm options which are IPX7. These lenses include a hydrophobic coated window to prevent water droplets from settling on the lens' surface. To prevent moisture from entering the housing, the lenses are sealed with multiple O-rings. TECHSPEC® Cw Series Fixed Focal Length Lenses are designed for up to 7.5 MegaPixel, 2/3" sensors and are ideal for applications including food, pharma, automotive, and security. These lenses won the Bronze-Level 2021 Vision Systems Design Innovators Award.

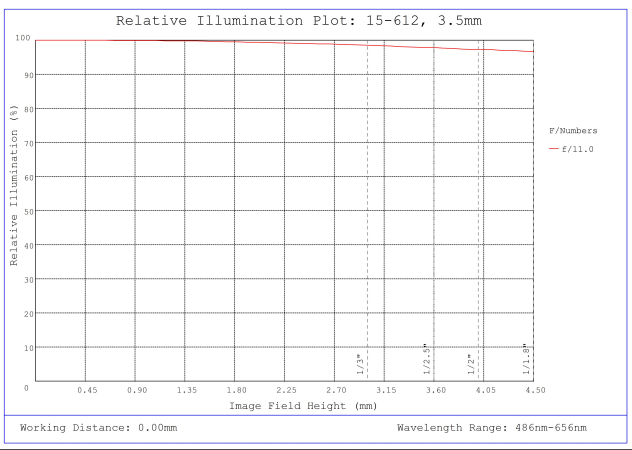
Edmund Optics has created a family of high performance optical designs (the C Series family) and developed 6 customized optomechanical solutions targeted for specific applications. These lens sub-families utilize the same optics as the C Series lenses providing the same optical performance in a variety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

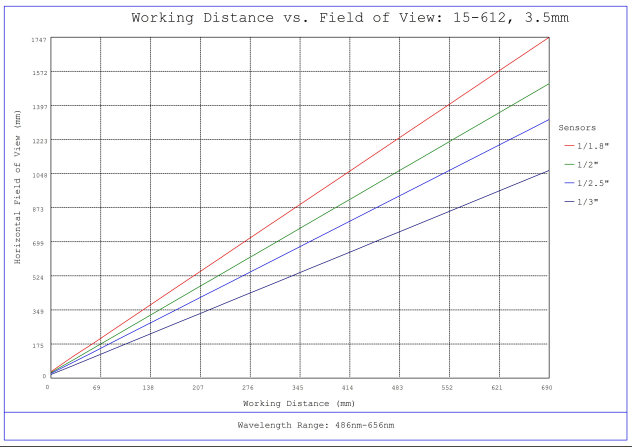
Technical Information



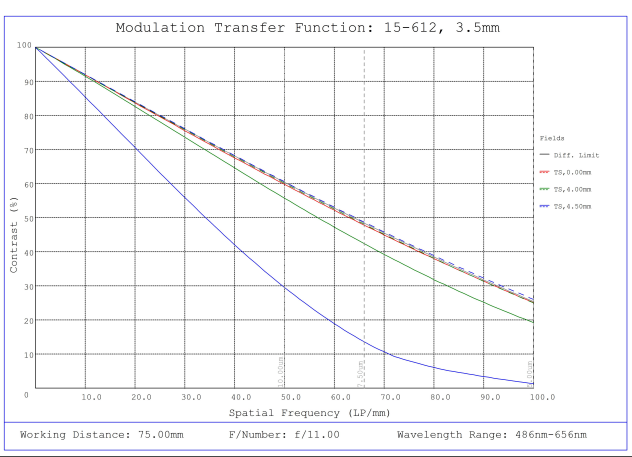
#15-612, 3.5mm f/11 Sealed Cw Series Fixed Focal Length Lens, Distortion Plot



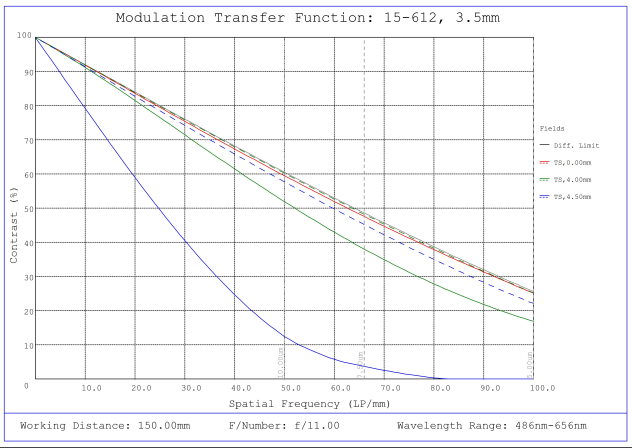
#15-612, 3.5mm f/11 Sealed Cw Series Fixed Focal Length Lens, Relative Illumination Plot



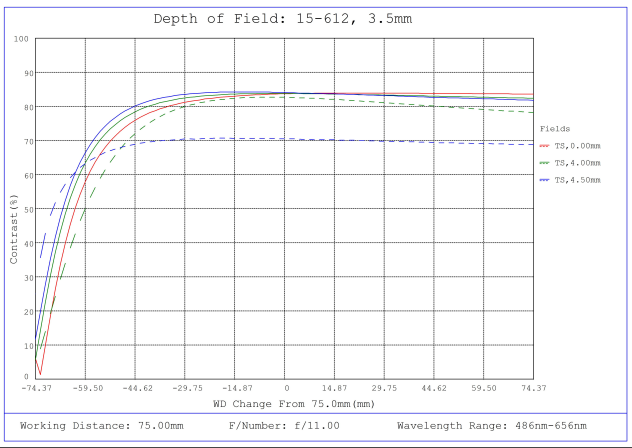
#15-612, 3.5mm f/11 Sealed Cw Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



#15-612, 3.5mm f/11 Sealed Cw Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 75mm Working Distance, f11



#15-612, 3.5mm f/11 Sealed Cw Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 150mm Working Distance, f11



#15-612, 3.5mm f/11 Sealed Cw Series Fixed Focal Length Lens, Depth of Field Plot, 75mm Working Distance, f11

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