

TECHSPEC® 12mm Cx Series Fixed Focal Length Lens



12mm Cx Series Fixed Focal Length Lens , #33-562

Stock **#33-562** 16 In Stock

-

1

+

€245⁰⁰

ADD TO CART

Volume Pricing	
Qty 1+	€245,00 each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Note: This item requires accessories for use | [Learn More](#)

Product Downloads

General

CxSeries

Product Family:

Note:

Cx Lens Accessory required for use. All field of view and working distance values listed assume a Cx Lens Accessory has been integrated. Cx Lens Accessory is not included and must be purchased separately.

Fixed Focal Length Lens	Type:
Modular	Special Type of Lens:
Physical & Mechanical Properties	
Fixed	Iris Option:
29.80	Length (mm):
30	Maximum Diameter (mm):
30	Outer Diameter (mm):
33	Weight (g):
0	Maximum Rear Protrusion (mm):
Optical Properties	
Field of View at Max Sensor Format: Horizontal: 81.2mm - 41.2° Vertical: 60.4mm - 31.3° Diagonal: 102.1mm - 50.5°	
Horizontal Field of View, 2/3" Sensor: 81.1mm - 41.1°	
Horizontal Field of View, 1/1.8" Sensor: 63.3mm - 35.1°	
Horizontal Field of View, 1/2" Sensor: 58.4mm - 30.3°	
Horizontal Field of View, 1/2.5" Sensor: 49.1mm - 27.6°	
Horizontal Field of View, 1/3" Sensor: 43.6mm - 22.9°	
11.00	Maximum Image Circle (mm):
0.0292	Numerical Aperture NA, Object Side:
7 (7)	Number of Elements (Groups):
12.00	Focal Length FL (mm):
100 - ∞	Working Distance (mm):
Accessory Dependent	Aperture (f/#):
Coating: 425 - 675nm BBAR	
Coating Specification: 425 - 675nm BBAR	
11.01	Entrance Pupil Position (mm):
17.32	Object Space Principal Plane (mm):
1.98	Image Space Principal Plane (mm):
-2.09	Maximum Distortion (%):
-11.38	Exit Pupil Position (mm):
VIS	Lens Wavelength Range:
Sensor	
2/3"	Maximum Sensor Format:
2.74	Pixel Size (µm):
Threading & Mounting	
M25.5 x 0.50 (Male)	Filter Thread:
#89-941 (Required)	Filter Thread Adapter:
Mount:	

Storage Temperature (°C):

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

- Up to 2/3", C-Mount Lens
- Up to 7.5 MegaPixels, 2.8µm Pixel Size Sensors
- Flexible (Cx) Version of our C Series Lenses with Interchangeable Apertures, Filters and Liquid Lens
- 12mm to 50mm Focal Length

These lenses won the Silver Level 2016 Innovators Award and the 2nd place 2017 Inspect 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](#).
- **Cl 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.

12mm Focal Length, #33-562

29.8mm (1.173")

11.5mm C-Mount Thread (.453")

1.2mm Slot (.047")

5mm (.197")

10.5mm (.413")

2.8mm (.11")

25.4mm (1")

24mm (.945")

M22x0.75

1"=32 TPI C-Mount

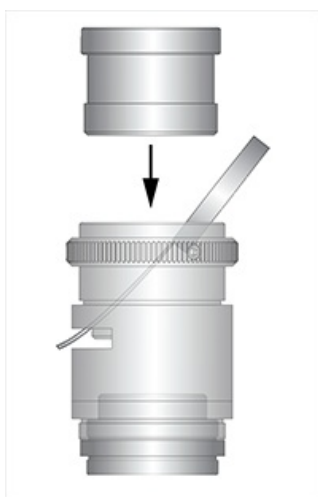
30mm (1.18")

5mm (.197")

	12mm	16mm	25mm	35mm	35mm	50mm
Compatible Liquid Lens	A-25H0	A-25H0	A-25H0	A-25H0	A-39N0	A-39N0
Compatible Liquid Lens Stock No.	#34-282	#34-282	#34-282	#34-282	#34-283	#34-283
Compatible Liquid Lens Development Kit	#34-284	#34-284	#34-284	#34-284	#34-285	#34-285
Liquid Lens Holder Stock No.	#33-631	#33-645	#33-660	#33-675	#33-674	#33-686

Step 1: Choose the focal length of the CxLens and the compatible Variable Focus Liquid Lens and Liquid Lens Holder. Or simply choose appropriate CxLens Kit, which includes a Cx lens and its compatible Variable Focus Liquid Lens and Liquid Lens Holder.

The diagram illustrates the assembly of a Cx Series Lens. It shows a Variable Focus Liquid Lens being inserted into a Liquid Lens Holder. The Liquid Lens Holder is then attached to the Cx Series Lens. The Cx Series Lens is shown in two parts: the main body and the front element. The Variable Focus Liquid Lens is shown being inserted into the Liquid Lens Holder, which is then attached to the Cx Series Lens. The Cx Series Lens is shown in two parts: the main body and the front element.



Step 2: Mount the Variable Focus Liquid Lens into the Liquid Lens Holder. Next, assemble both items into the middle of the Cx Lens. [Complete instructions can be found in the downloadable PDF manual.](#)

Step 3, Option 1: Attach Liquid Lens to a [PixeLink USB 3.0 Autofocus Camera](#). This camera provides seamless integration - both driver and autofocus software is included.



Step 3, Option 2: Use with standard C-Mount camera. Driver is not included and a separate Liquid Lens driver must be purchased separately (included in Liquid Lens Development Kit).



Compatible Cameras