

55mm Focal Length Partially Telecentric Video Lens



55mm Focal Length Partially Telecentric Video Lens, #52-271


Stock #52-271 **10 In Stock**

- 1 +

C\$1,141^{.00}

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Product Downloads
 EO Spec Sheet

General

Product Family: 55mm FL Partially-Telecentric Imaging Lenses	Note: PMAG: Non-Telecentric: 0.5X - 0X Telecentric: 0.5X - 0.4X Working Distance (mm): Non-Telecentric: 127 - ∞ Telecentric: 127 - 158.75
Type: Telecentric Lens	Special Type of Lens: Partially Telecentric

Physical & Mechanical Properties

Iris Option: Variable	Length (mm): 92.90
Maximum Diameter (mm): 53	Outer Diameter (mm): 53
Weight (g): 314.68	

Optical Properties

Horizontal Field of View, 1/2" Sensor: Non-Telecentric: 12.8mm - 6.7° Telecentric: 12.8 - 16.0mm	Maximum Image Circle (mm): 11.00
Focal Length FL (mm): 55.00	Primary Magnification PMAG: 0.5X - 0.4X
Working Distance (mm): 127 - 158.75	Aperture (f/#): f/2.8 - f/32
Distortion (%): <1.0	Magnification: 0.5X - 0.4X
Maximum Distortion (%): 1	Lens Wavelength Range: VIS

Sensor

Maximum Sensor: 2/3"	Pixel Size (µm): 7.00
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Format:

Threading & Mounting

Filter Thread: M43 x 0.75

Mount: C-Mount

Regulatory Compliance

RoHS 2015: [Exempt](#)

Reach 224: [Contains SVHC\(s\)](#)

Certificate of Conformance: [View](#)

Product Details

- 2/3", C-Mount Lens
- Up to 1.3 MegaPixels, 7µm Pixel Size Sensors
- Function as Both Macro and Telecentric Lens
- ±12.5mm of Object Movement Before 1% Error Image Scale Occurs

55mm FL Partially-Telecentric Imaging Lenses allow ±12.5mm of object movement (at 0.5X magnification) before a 1% error in image scale occurs, while conventional lenses permit typically ±1.7mm of movement under the same conditions. Telecentric lenses yield constant magnification over a range of working distances, virtually eliminating viewing angle error. The lens' protective window (at C-Mount end) needs to be removed for use with adapter lenses. 55mm FL Partially-Telecentric Imaging Lenses are ideal in machine vision applications requiring accurate measurement of three-dimensional objects with slight height variations. By eliminating the perspective distortion and magnification error inherent in conventional lenses, they yield dimensionally accurate images that are easily interpreted by software.

For mounting these lenses, our [Industrial Boom Stands](#) and mounting adapters are recommended as workstation platforms. Ring light guides can not be mounted directly on this lens because of the front focusing adjustment.

Technical Information

	Telecentric Specifications	Non-Telecentric Specifications	
	Lens with 2X Converter	Lens with 2X Converter	Lens with 0.75X Converter
Primary Magnification PMAG	1.0X - 0.4X (full range)	1.0X - 0X	0.375X - 0X
Field of View	6.4 - 16.0mm	6.4mm - 3.3°	17.0 - 8.9°
Working Distance	5.25" - 11.25"	5.25" - ∞	5" - ∞

Accessories

Note: Compatible accessories for individual stock numbers may vary. If unsure about which accessories work with your products, please contact us [here](#).

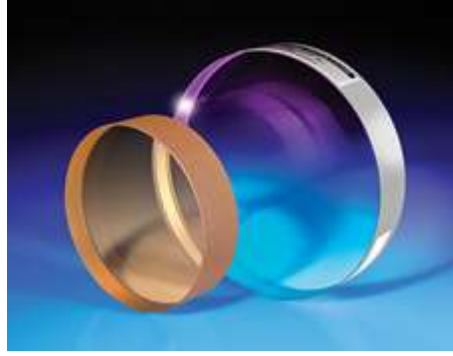
	Title	Compare	Stock Number	Price	Buy
MORE+	2X Converter for 55mm FL Partially Telecentric Lens		#52-272	C\$378.00 Request Quote	CONTACT US <input type="text" value="1"/>

Frequently Purchased Together



#32-506 - 40mm 50R/50T Cube Beamsplitter
C\$672.00

Qty



#01-915-000 - 76.2mm Dia. $\lambda/10$ Fused Silica Optical Flat
C\$735.00

Qty



#03-655 - Sliding 2" x 3" Base Plate
C\$35.35

Qty



#31-433 - 51 x 76mm, 50R/50T, Plate Beamsplitter
C\$130.20

Qty

Resources

Media Type

- Application Note
- Video
- FAQ
- Glossary
- Published Article
- Technical Tool

APPLICATION NOTE

Anti-Reflection (AR) Coatings

APPLICATION NOTE

An Introduction to Optical Coatings

VIDEO

Wavelength and f#

APPLICATION NOTE

Understanding Focal Length and Field of View

APPLICATION NOTE

Introduction to Modulation Transfer Function

VIDEO

Edmund Optics Imaging: Telecentric...

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