

**TECHSPEC® 0.367X CobaltTL Telecentric Lens**



0.367X Magnification



Stock **#88-602** **10 In Stock**

⊖ 1 ⊕ A\$3,212.<sup>00</sup>

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Volume Pricing

Qty 1+	A\$3,212.00 each
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**General**

CobaltTL Series **Product Family:**

**Stock No. of Mounting Clamp:**  
#89-721 Sold Separately

Telecentric Lens **Type:**

**Physical & Mechanical Properties**

Variable	Iris Option:
163.50	Length (mm):
70.0	Maximum Diameter (mm):
627	Weight (g):
17.5	Flange Distance (mm):

## Optical Properties

38.41mm	Horizontal Field of View, 1.1" Sensor:
34.92mm	Horizontal Field of View, 1" Sensor:
24.00mm	Horizontal Field of View, 2/3" Sensor:
19.63mm	Horizontal Field of View, 1/1.8" Sensor:
17.45mm	Horizontal Field of View, 1/2" Sensor:
17.60	Maximum Image Circle (mm):
0.031	Numerical Aperture NA, Object Side:
10 (7)	Number of Elements (Groups):
<0.114	Typical Telecentricity @ 588nm (°):
<0.084	Typical Distortion @ 588nm (%):
0.367X	Primary Magnification PMAG:
0.37	Telecentric Lens Magnification:
169	Working Distance (mm):
38.4 x 28.8	FOV @ Max Sensor Format, H x V (mm):
f/6 - f/16	Aperture (f/#):
425 - 675nm BBAR	Coating:
±4.01mm at f/10 (20% @ 20 lp/mm)	Depth of Field (mm):
0.367X	Magnification:
VIS	Lens Wavelength Range:

## Sensor

1.1"	Maximum Sensor Format:
2.20	Pixel Size (µm):

## Threading & Mounting

M67 x 0.75 (Female)	Filter Thread:
C-Mount	Mount:

## Regulatory Compliance

<a href="#">View</a>	Certificate of Conformance:
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## Product Details

- High Resolution Bi-Telecentric Lens with In-Line Illumination Options
- Up to 20 MegaPixels, 2.2µm Pixel Size
- 1.1", C-Mount Telecentric Lens with f/#s as Low as f/4

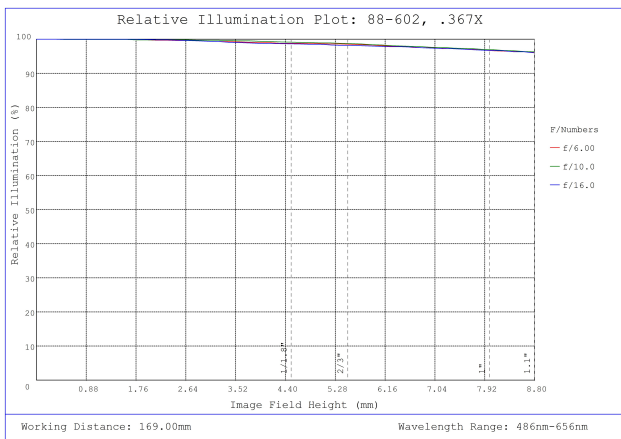
TECHSPEC® CobaltTL Telecentric Lenses are designed for semiconductor and electronics inspection, measurement, and gauging applications. These telecentric lenses achieve high light throughput with industry leading low f/#s.

Featuring less than 0.015° telecentricity and low 0.013% distortion, these lenses are ideal for image stitching applications. These 17.6mm diagonal sensor format lenses are compatible with the Sony IMX304 1.1" sensors and other similar format sensors such as the Sony IMX183. TECHSPEC® CobaltTL Telecentric Lenses produce unparalleled levels of contrast yielding maximum image quality with the highest degree of measurement accuracy. In-line versions provide the ability to rotate/reposition the inline illumination port to allow for maximum flexibility when machine building. TECHSPEC® CobaltTL Telecentric Lenses are compatible with high vibration environments and feature a removable recessed set screw for securely locking the iris in place.

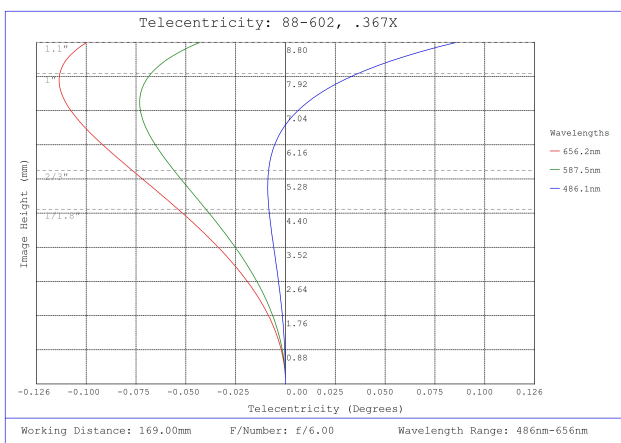
## Technical Information



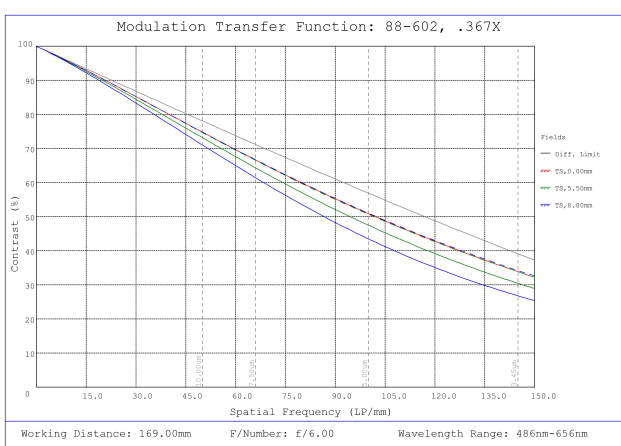
#88-602, 0.367X CobaltTL Telecentric Lens, Distortion Plot



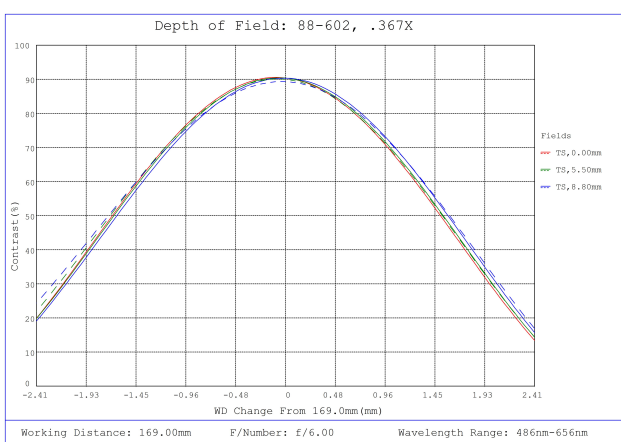
#88-602, 0.367X CobaltTL Telecentric Lens, Relative Illumination Plot



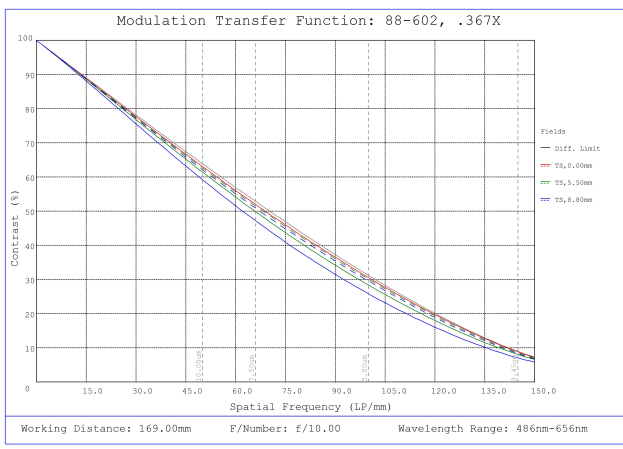
#88-602, 0.367X CobaltTL Telecentric Lens, Telecentricity Plot



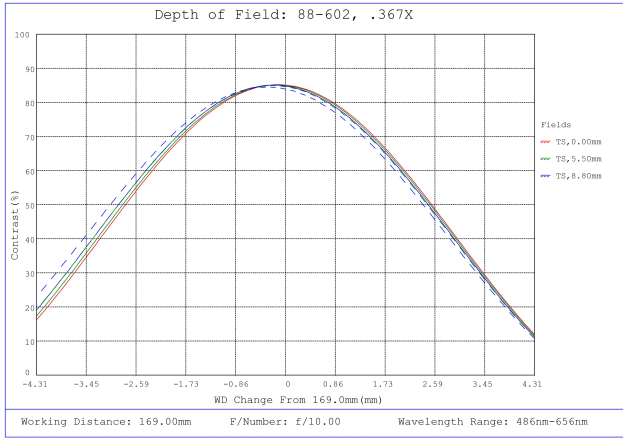
#88-602, 0.367X CobaltTL Telecentric Lens, Modulated Transfer Function (MTF) Plot, 169mm Working Distance, f6



#88-602, 0.367X CobaltTL Telecentric Lens, Depth of Field Plot, 169mm Working Distance, f6



#88-602, 0.367X CobaltTL Telecentric Lens, Modulated Transfer Function (MTF) Plot, 169mm Working Distance, f10



#88-602, 0.367X CobaltTL Telecentric Lens, Depth of Field Plot, 169mm Working Distance, f10

Description		Stock No.	Length (A)	Front Diameter (B)	Back Diameter (C)
0.28X	C-Mount	#62-921	197.59mm	138.6mm	50mm
0.36X	C-Mount	#88-602	163.5mm	70mm	43.5mm
0.5X	C-Mount	#62-911	172.9mm	90mm	50mm
0.55X	C-Mount	#88-603	182.5mm	62mm	43.5mm
0.69X	C-Mount	#15-872 / #15-873 (In-Line)	174.96mm	55mm	46mm
0.9X	C-Mount	#62-901	199.8mm	65mm	53mm