

TECHSPEC[®] 0.37X MercuryTL™ Liquid Lens Telecentric Lens



0.37X MercuryTL™ Liquid Lens Telecentric Lens, #36-190



Stock **#36-190** CLEARANCE **1 In Stock**

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1

+

S\$2,086^{.00}

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Volume Pricing	
Qty 1+	S\$2,086.00 each
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General	
MercuryTL™ Series	Product Family:
#56-870 Sold Separately	Stock No. of Mounting Clamp:
Telecentric Lens	Type:
Liquid Lens Focusable	Special Type of Lens:

Physical & Mechanical Properties	
157.30	Length excluding Threads (mm):
45	Maximum Diameter (mm):
238	Weight (g):
Optical Properties	
19.5mm	Horizontal Field of View, 1/1.8" Sensor:
17.3mm	Horizontal Field of View, 1/2" Sensor:
13mm	Horizontal Field of View, 1/3" Sensor:
<0.057	Typical Telecentricity @ 588nm (°):
<0.4	Typical Distortion @ 588nm (%):
0.37X	Primary Magnification PMAG:
0.37	Telecentric Lens Magnification:
84 - 101	Working Distance (mm):
19.5 x 14.6	FOV @ Max Sensor Format, H x V (mm):
f/10	Aperture (f/#):
Variable	Depth of Field (mm):
VIS	Lens Wavelength Range:
Sensor	
1/1.8"	Maximum Sensor Format:
4.50	Pixel Size (µm):
Threading & Mounting	
M43 x0.75 (Female)	Filter Thread:
45	Mounting Diameter (mm):
C-Mount	Mount:
Regulatory Compliance	
View	Certificate of Conformance:

Product Details

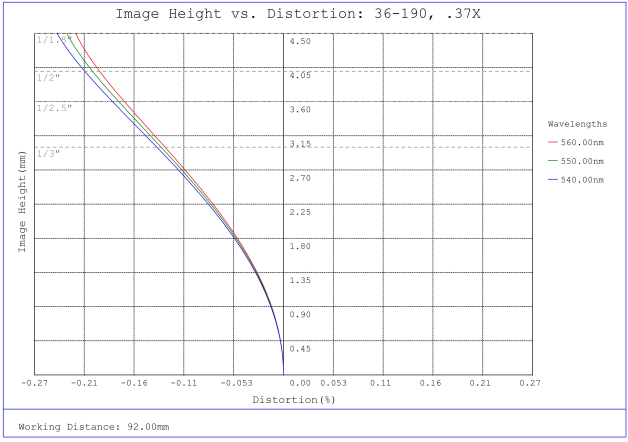
- Liquid Lens for Extended Depth of Field Telecentric Lens
- Up to 2.3 MegaPixels, 4.5µm Pixel Size Sensors
- Up to 2/3", C-Mount Telecentric Lens
- Magnification from 0.15X to 0.75X

TECHSPEC® MercuryTL™ Liquid Lens Telecentric Lenses combine the capabilities of a telecentric lens with the flexibility of a liquid lens. These lenses combine the unique feature of telecentric lenses, eliminating parallax (or perspective) error, with a liquid lens, allowing for the focus to be electronically controlled. This combination provides quick working distance adjustment, while maintaining telecentricity, distortion, and image performance throughout the entire working distance range. TECHSPEC® MercuryTL™ Liquid Lens Telecentric Lenses are ideal for gauging, measurement, and placement applications where quick depth of field adjustment is required.

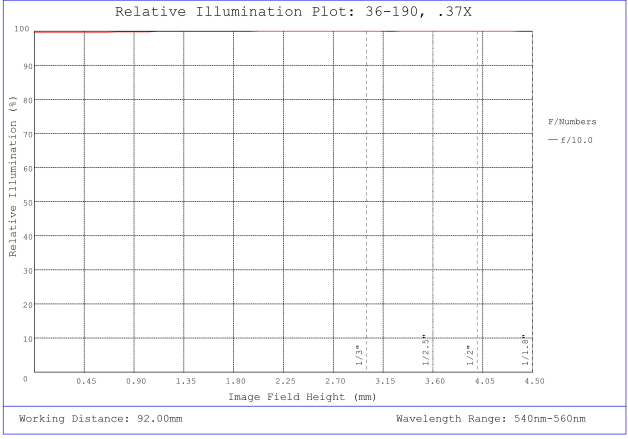
As the liquid lens is used to focus the telecentric lens, its curvature changes. As its curvature changes, there will be small changes in the ray angles in the rear of the lens (incident on the image sensor). As a result, there are small field of view changes over the working distance range as the liquid lens refocuses the lens. However, the front (object space) ray angles are unaffected by the liquid lens changing curvature, allowing the telecentric lens to maintain telecentricity over the entire working distance range.

Note: Hirose cables and [Liquid Lens Driver](#) sold separately.

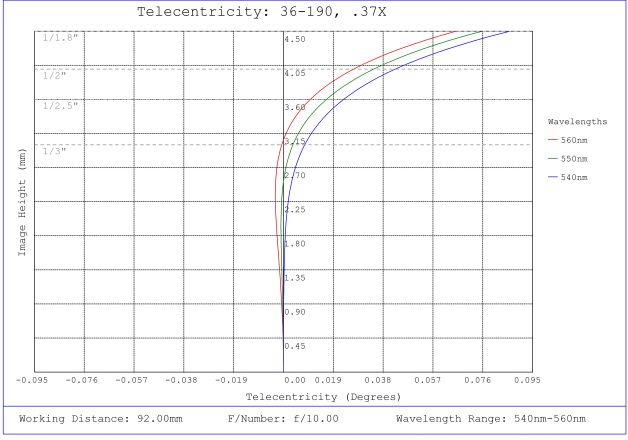
Technical Information



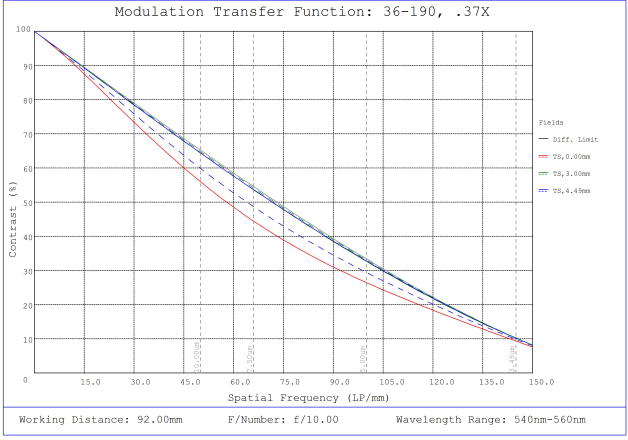
#36-190, 0.37X MercuryTL™ Liquid Lens Telecentric Lens, Distortion Plot



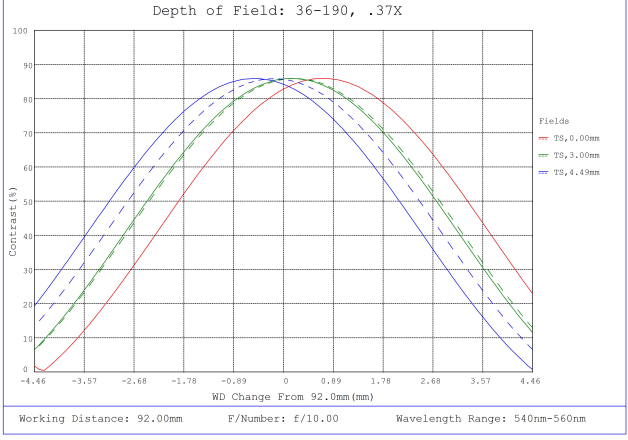
#36-190, 0.37X MercuryTL™ Liquid Lens Telecentric Lens, Relative Illumination Plot



#36-190, 0.37X MercuryTL™ Liquid Lens Telecentric Lens, Telecentricity Plot



#36-190, 0.37X MercuryTL™ Liquid Lens Telecentric Lens, Modulated Transfer Function (MTF) Plot, 92mm Working Distance, f10



#36-190, 0.37X MercuryTL™ Liquid Lens Telecentric Lens, Depth of Field Plot, 92mm Working Distance, f10