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TECHSPEC® 0.37X MercuryTL™ Liquid Lens Telecentric Lens

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

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

- 1 + **C$2,237.93**

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Volume Pricing	
Qty 1+	**C$2,237.93** each
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General

Product Family:
MercuryTL™ Series

Stock No. of Mounting Clamp:
#56-870 Sold Separately

Type:
Telecentric Lens

Special Type of Lens:
Liquid Lens Focusable

Physical & Mechanical Properties

Length excluding Threads (mm):	157.30
Maximum Diameter (mm):	45
Weight (g):	238

Optical Properties

Horizontal Field of View, 1/1.8" Sensor:	19.5mm
Horizontal Field of View, 1/2" Sensor:	17.3mm
Horizontal Field of View, 1/3" Sensor:	13mm
Typical Telecentricity @ 588nm (°):	<0.057
Typical Distortion @ 588nm (%):	<0.4
Primary Magnification PMAG:	0.37X
Telecentric Lens Magnification:	0.37
Working Distance (mm):	84 - 101
FOV @ Max Sensor Format, H x V (mm):	19.5 x 14.6
Aperture (f/#):	f/10
Depth of Field (mm):	Variable
Lens Wavelength Range:	VIS

Sensor

Maximum Sensor Format:	1/1.8"
Pixel Size (µm):	4.50

Threading & Mounting

Filter Thread:	M43 x 0.75 (Female)
Mounting Diameter (mm):	45
Mount:	C-Mount

Regulatory Compliance

Certificate of Conformance:	View

Product Details

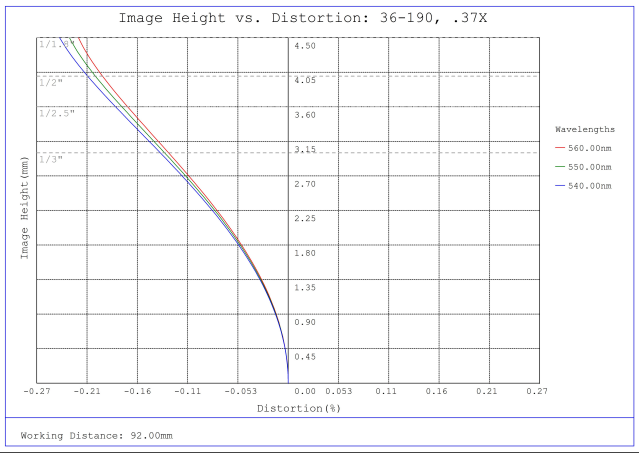
- Liquid Lens for Extended Depth of Field Telecentric Lens
- Up to 2.3 MegaPixels, 4.5µm Pixel Size Sensors
- Up to 2/3", C-Mount Telecentric Lens
- Magnification from 0.15X to 0.75X

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.

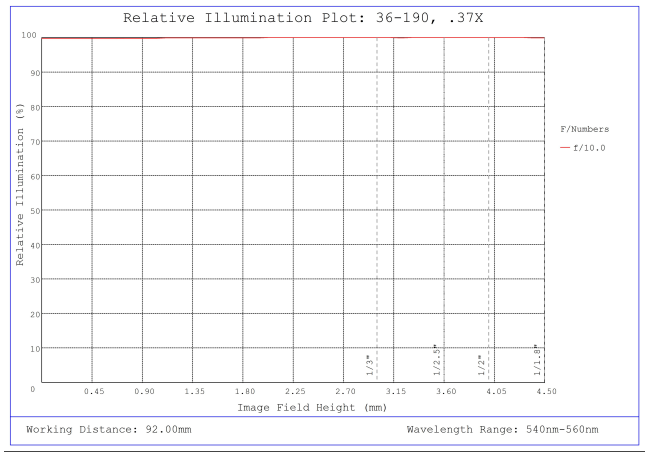
As the liquid lens is used to focus the telecentric lens, its curvature changes. As its curvature changes, there will be small changes in the ray angles in the rear of the lens (incident on the image sensor). As a result, there are small field of view changes over the working distance range as the liquid 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.

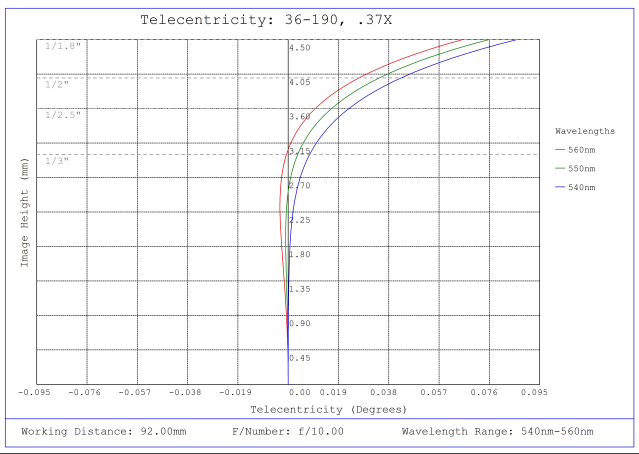
Technical Information



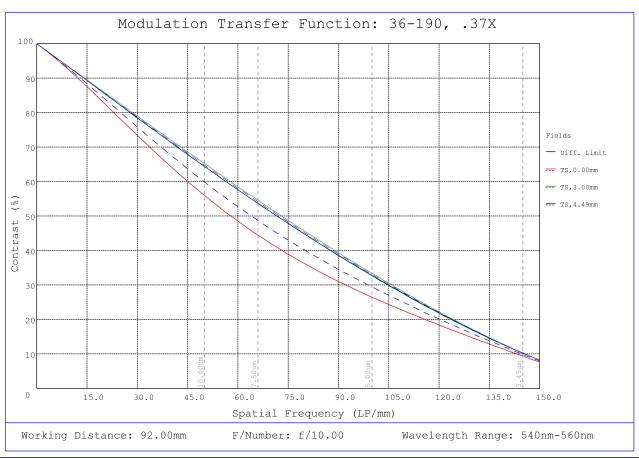
#36-190, 0.37X MercuryTL™ Liquid Lens Telecentric Lens, Distortion Plot



#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

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