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TECHSPEC® 0.050X, 1/1.8" C-Mount TitanTL® Telecentric Lens

TitanTL® Telecentric Lens

Stock **#34-002** **5 In Stock**

- 1 + **A$8,483**.00

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Qty 1+	**A$8,483.00** each
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General

Product Family:
TitanTL® Series

Stock No. of Mounting Clamp:
#28-641 (Sold Separately)

Type:
Telecentric Lens

Physical & Mechanical Properties

Iris Option:
Variable

Length (mm):
383.20

Maximum Diameter (mm):
208

Weight (kg):
6.98

Rear Filter Diameter (mm):
12.7

Optical Properties

Horizontal Field of View, 1/1.8" Sensor:
145.6mm

Horizontal Field of View, 1/2" Sensor:
129.4mm

Maximum Image Circle (mm):
9.00

Numerical Aperture NA, Object Side:
0.0031

Resolution, Image Space:
70 lp/mm @ 40% (MTF, open)

Number of Elements (Groups):
6 (4)

Primary Magnification PMAG:
0.050X

Telecentric Lens Magnification:
0.05

Working Distance (mm):
287

FOV @ Max Sensor Format, H x V (mm):
144.0 x 108.0

Aperture (f/#):
f/8 - f/16

Coating:
λ/4 MgF_2

Depth of Field (mm):
±159.4mm (20% @ 20 lp/mm, open)

Magnification:
0.050X

Resolution, Image Space MTF @ F8:
70 lp/mm @ 40%

Typical Distortion @ 520nm (%):
<0.03

Typical Telecentricity @ 520nm (°):
<0.1

Lens Wavelength Range:
VIS

Sensor

Maximum Sensor Format:
1/1.8"

Pixel Size (µm):
2.74

Threading & Mounting

Filter Thread:
N/A

Mount:
C-Mount

Regulatory Compliance

Certificate of Conformance:
View

Product Details

- Large Field of View Telecentric Lens
- Up to 31.4 MegaPixels, 3.45µm Pixel Size Sensors
- Full Frame (35mm), C-Mount, T-Mount, M58-Mount, F-Mount Telecentric Lens
- Magnification from 0.037X to 0.377X

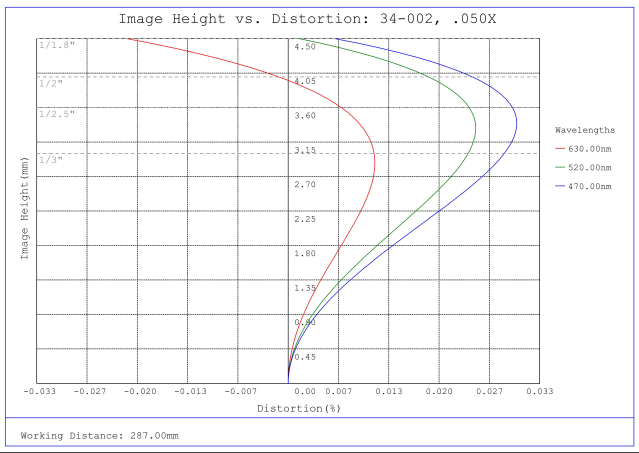
TECHSPEC® TitanTL® Telecentric Lenses are designed for machine vision systems and metrology applications that require a large field of view. These lenses feature large maximum sensor formats, a variety of working distance and magnification options, and a rear filter holder on the back of the lenses to allow for easy filter integration. On our 118mm, 182mm and 242mm FOV versions, the integrated mounting flange allows for ease of securing each

lens without requiring an additional mount and provides an easy to locate reference plane. TECHSPEC® TitanTL® Telecentric Lenses contain shims that provide adjustment for variation in camera sensor location, an adjustable iris and a 3 set screw lens mount for simple rotational alignment to the camera. Typical applications include automotive and electronic inspection, measurement and gauging applications.

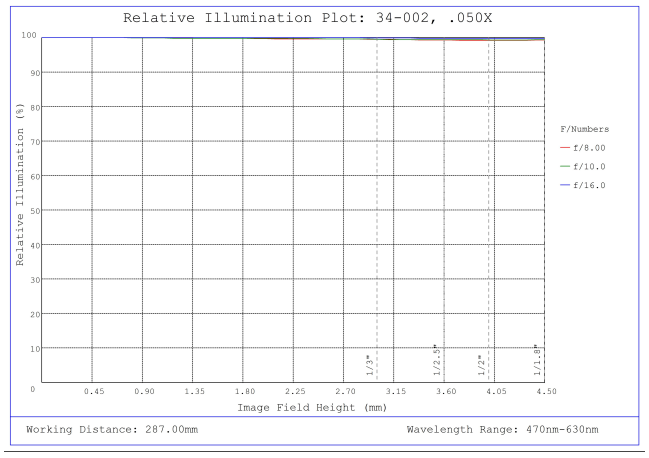
These lenses won the **Silver Level 2017 Innovators Award**.

Note: Detailed inspection reports included with each lens.

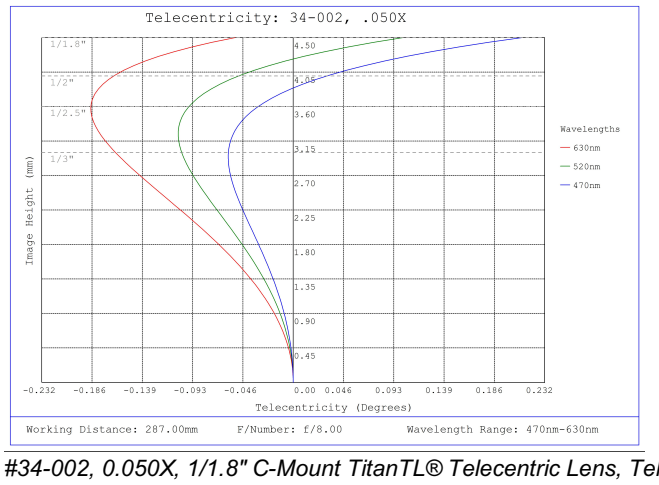
Technical Information



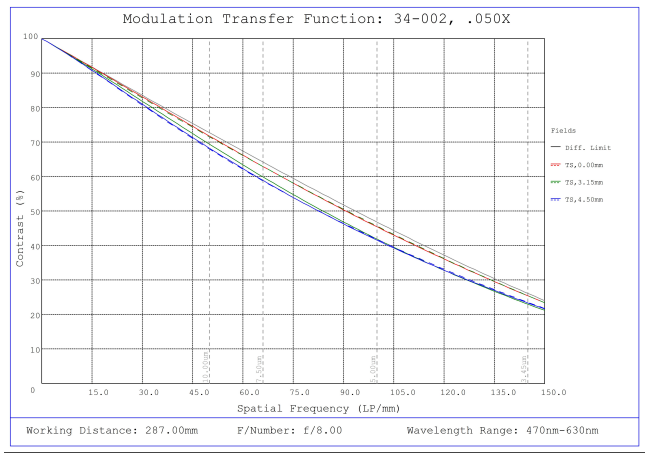
#34-002, 0.050X, 1/1.8" C-Mount TitanTL® Telecentric Lens, Distortion Plot



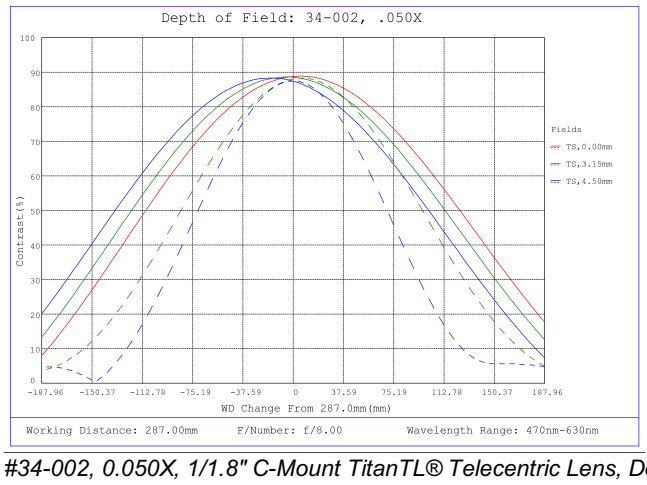
#34-002, 0.050X, 1/1.8" C-Mount TitanTL® Telecentric Lens, Relative Illumination Plot



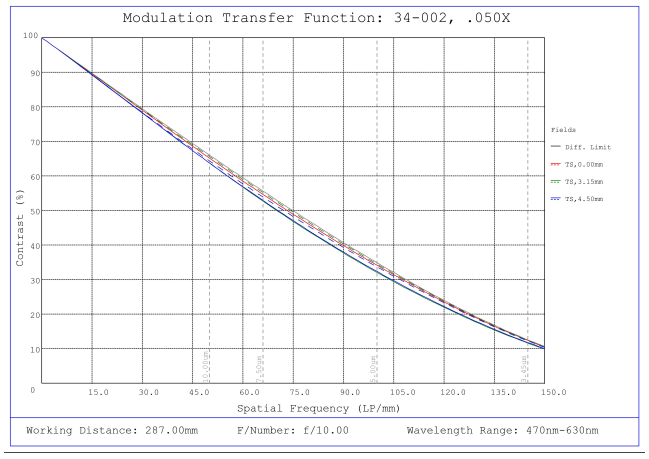
#34-002, 0.050X, 1/1.8" C-Mount TitanTL® Telecentric Lens, Telecentricity Plot



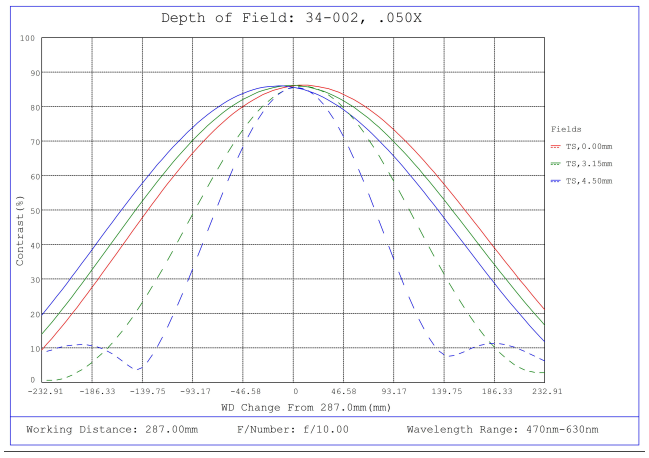
#34-002, 0.050X, 1/1.8" C-Mount TitanTL® Telecentric Lens, Modulated Transfer Function (MTF) Plot, 287mm Working Distance, f8



#34-002, 0.050X, 1/1.8" C-Mount TitanTL® Telecentric Lens, Depth of Field Plot, 287mm Working Distance, f8



#34-002, 0.050X, 1/1.8" C-Mount TitanTL® Telecentric Lens, Modulated Transfer Function (MTF) Plot, 287mm Working Distance, f10



#34-002, 0.050X, 1/1.8" C-Mount TitanTL® Telecentric Lens, Depth of Field Plot, 287mm Working Distance, f10

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