

TECHSPEC® 25mm LT Series Fixed Focal Length Lens

#14-363



25mm FL Front, #14-363

TECHSPEC® LT Series Fixed Focal Length Lenses feature a high-resolution f/2.8 optical design with an integrated Optotune liquid lens for fast electronic focus. The increased light throughput f/2.8 aperture is ideal for high-speed machine vision applications. When combined with an appropriate camera and software, the focus tunable liquid lens provides the active focus control needed to achieve an autofocus solution. These C-Mount lenses are optimized for 1.1" sensors and have front filter threading to integrate imaging filters to meet application requirements. TECHSPEC® LT Series Fixed Focal Length Lenses are ideal for machine vision and factory automation applications where focusing at multiple distances is required, such as quality inspection systems, rapid automation, and package sorting. The TECHSPEC® LT Series Fixed Focal Length Lenses won the [Gold-Level 2021 Vision Systems Design Innovators Award](#) and [third place 2021 reader's choice inspect Award](#).

inspect

award 2021

winner

Note: Hirose cables (2 length options) and Lens Driver are required for operation and sold separately.

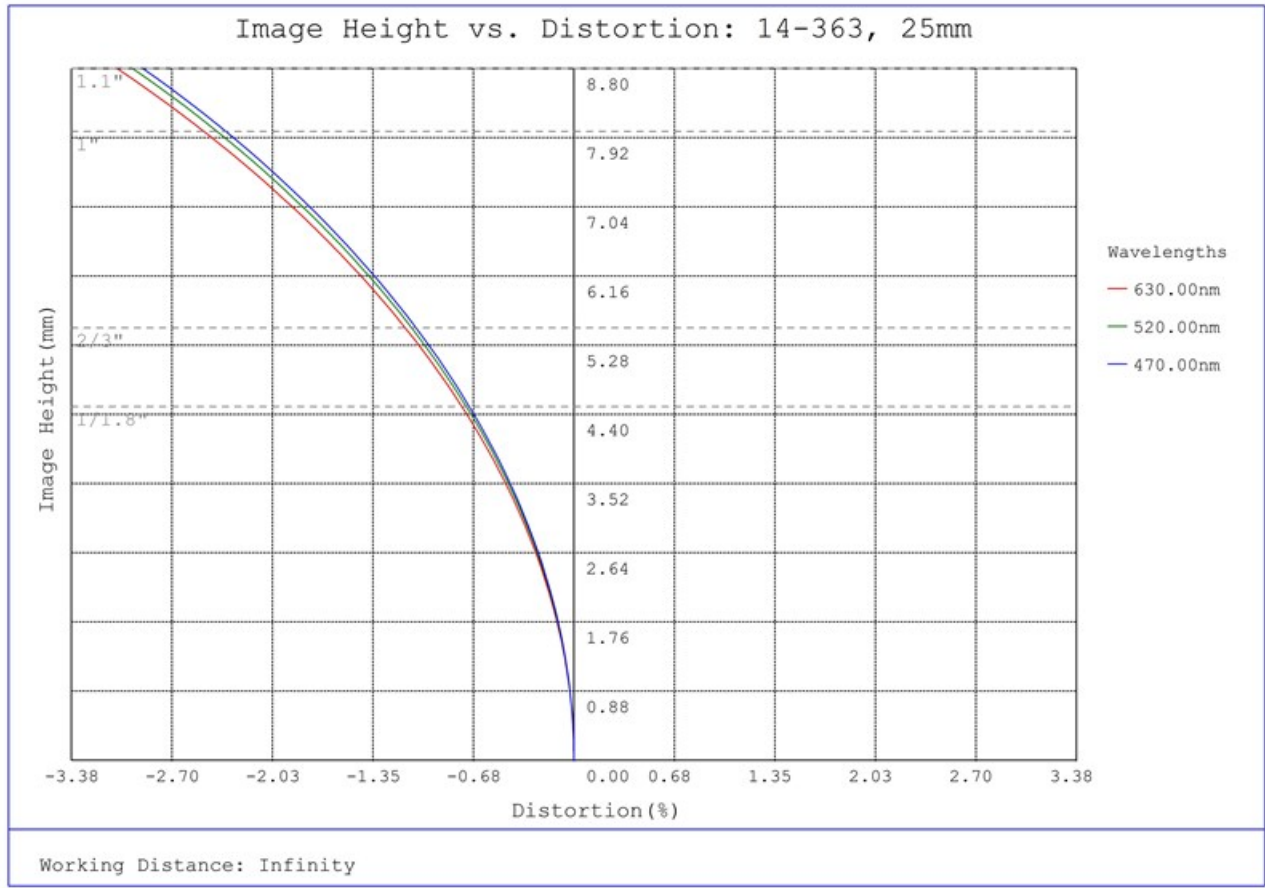
Outer Diameter (mm):	78.5
Note:	Diameter includes liquid lens
Type:	Fixed Focal Length Lens
Style:	VIS
Coating:	$\lambda/4$ MgF ₂
Integrated Liquid Lens Model:	Optutune EL-10-30-TC-VIS-5D

Optical

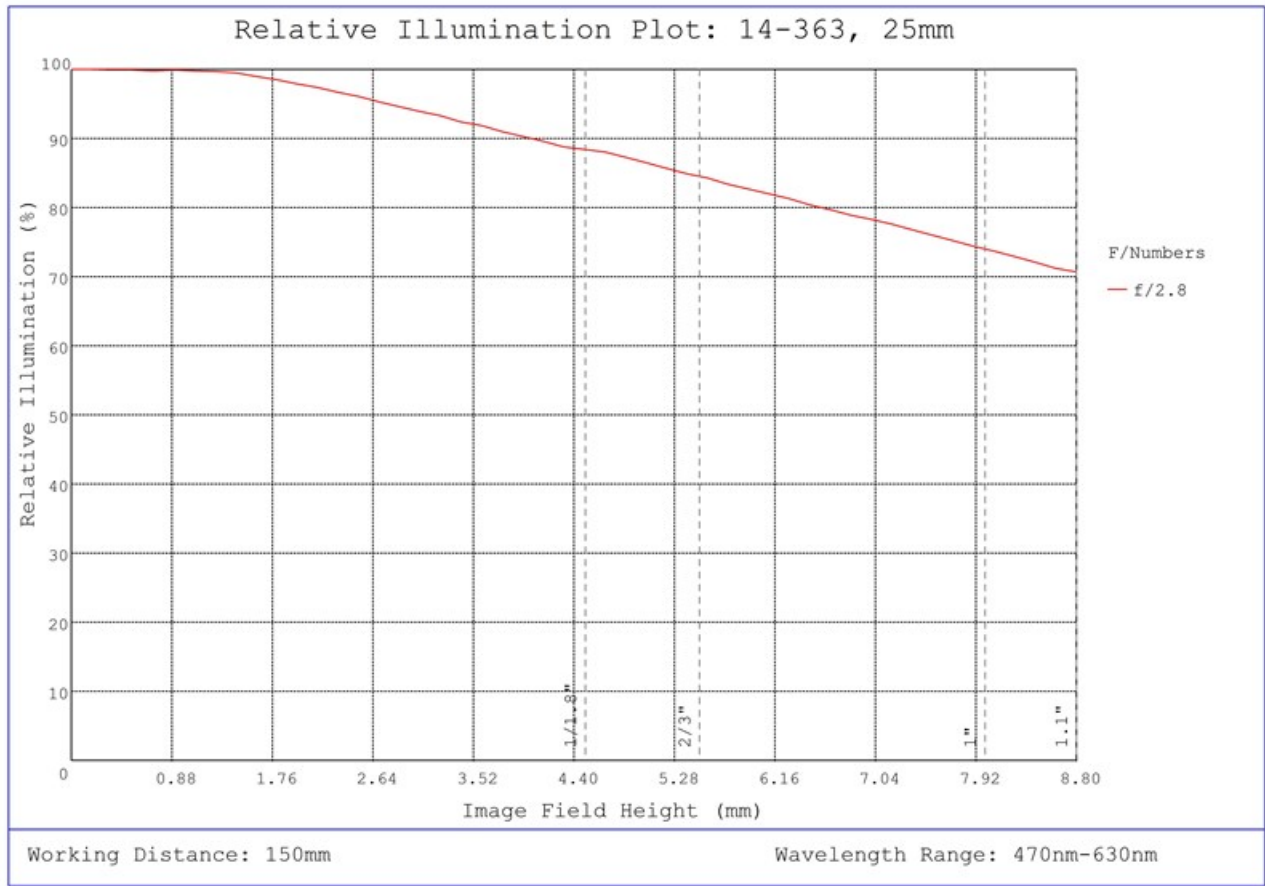
Horizontal Field of View, 1/2" Sensor:	56.4mm - 14.8°
Horizontal Field of View, 2/3" Sensor:	77.9mm - 32.3°
Horizontal Field of View, 1/3" Sensor:	42.2mm - 11.1°
Horizontal Field of View, 1" Sensor:	114.9mm - 29.4°
Maximum Image Circle (mm):	17.6
Numerical Aperture NA, Object Side:	0.02
Horizontal Field of View @ Max Sensor Format:	165.5mm - 49.1°
Horizontal Field of View, 1.1" Sensor:	127.1mm - 32.3°
Horizontal Field of View, 1/1.8" Sensor:	63.5mm - 16.6°
Horizontal Field of View, 1/2.5" Sensor:	51.0mm - 13.4°
Focal Length FL (mm):	25.00
Primary Magnification PMAG:	0.114
Maximum Sensor Format:	1.1"
Working Distance (mm):	150 - ∞
Aperture (f/#):	f/2.8
Distortion (%):	<3.7
Coating Specification:	λ/4 MgF ₂
Entrance Pupil Position (mm):	52.38
Horizontal Field of View, 1/4" Sensor:	31.5mm - 8.3°
Object Space Principal Plane (mm):	72.02
Image Space Principal Plane (mm):	4.02
Field of View at Max Sensor Format:	Horizontal: 127.1mm - 32.3° Vertical: 94mm - 24.3° Diagonal: 162.2mm - 40.3°
Maximum Distortion (%):	-2.93
Exit Pupil Position (mm):	-107.78

Mechanical

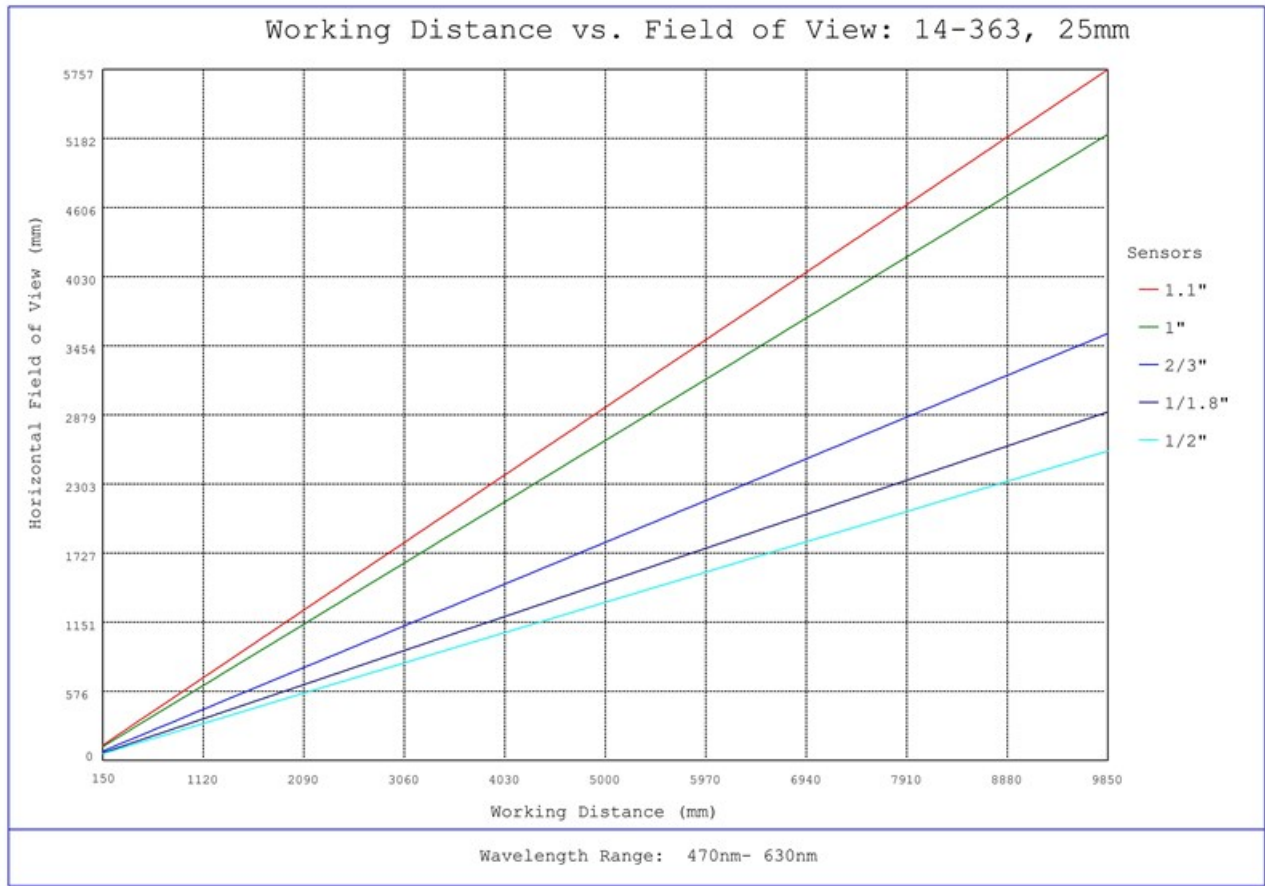
Iris Option:	Fixed
Length (mm):	99.51
Filter Thread:	M62 x 0.75 (Female)
Maximum Diameter (mm):	78.5
Weight (g):	366.5
Maximum Rear Protrusion (mm):	0
Number of Elements (Groups):	9 (6)
Mount:	C-Mount



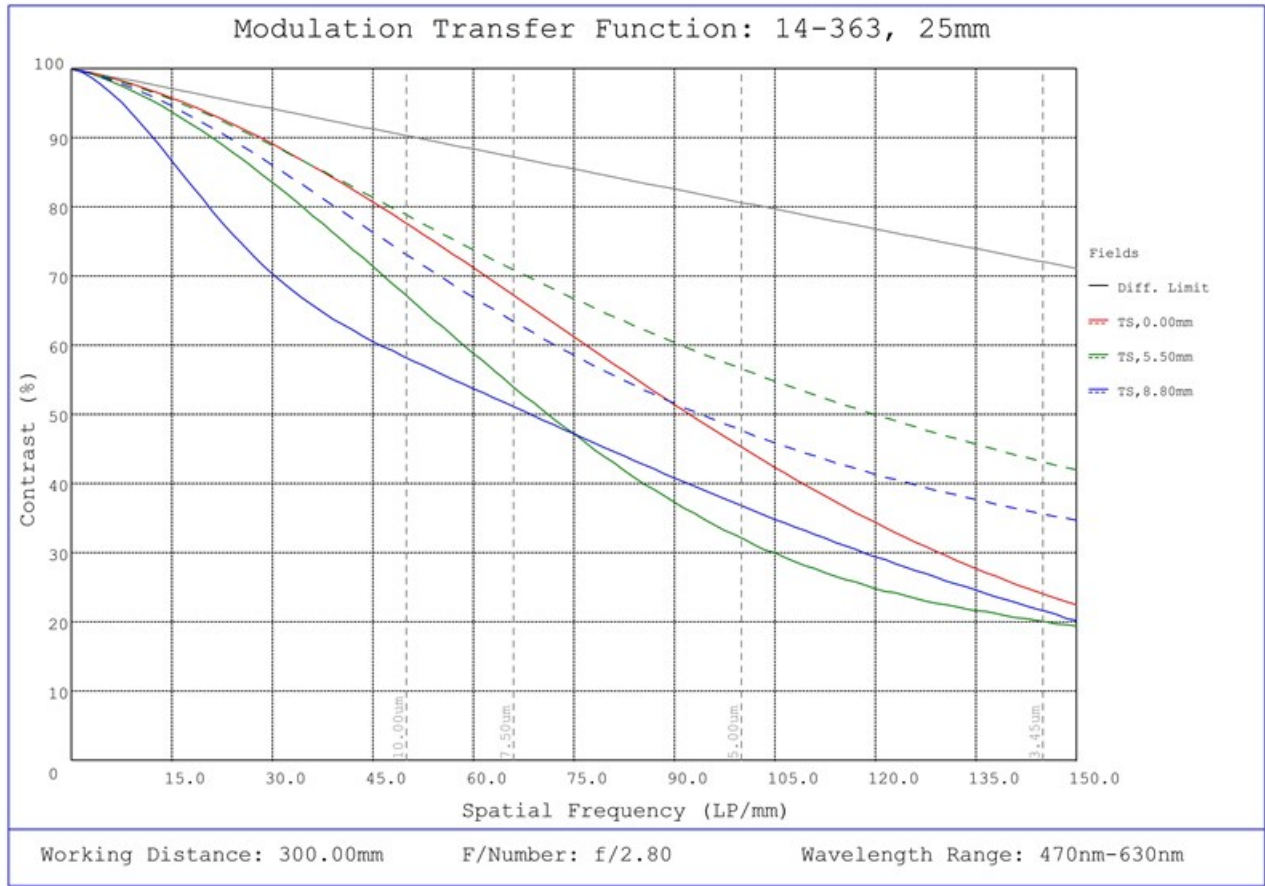
#14-363, 25mm LT Series Fixed Focal Length Lens, Distortion Plot



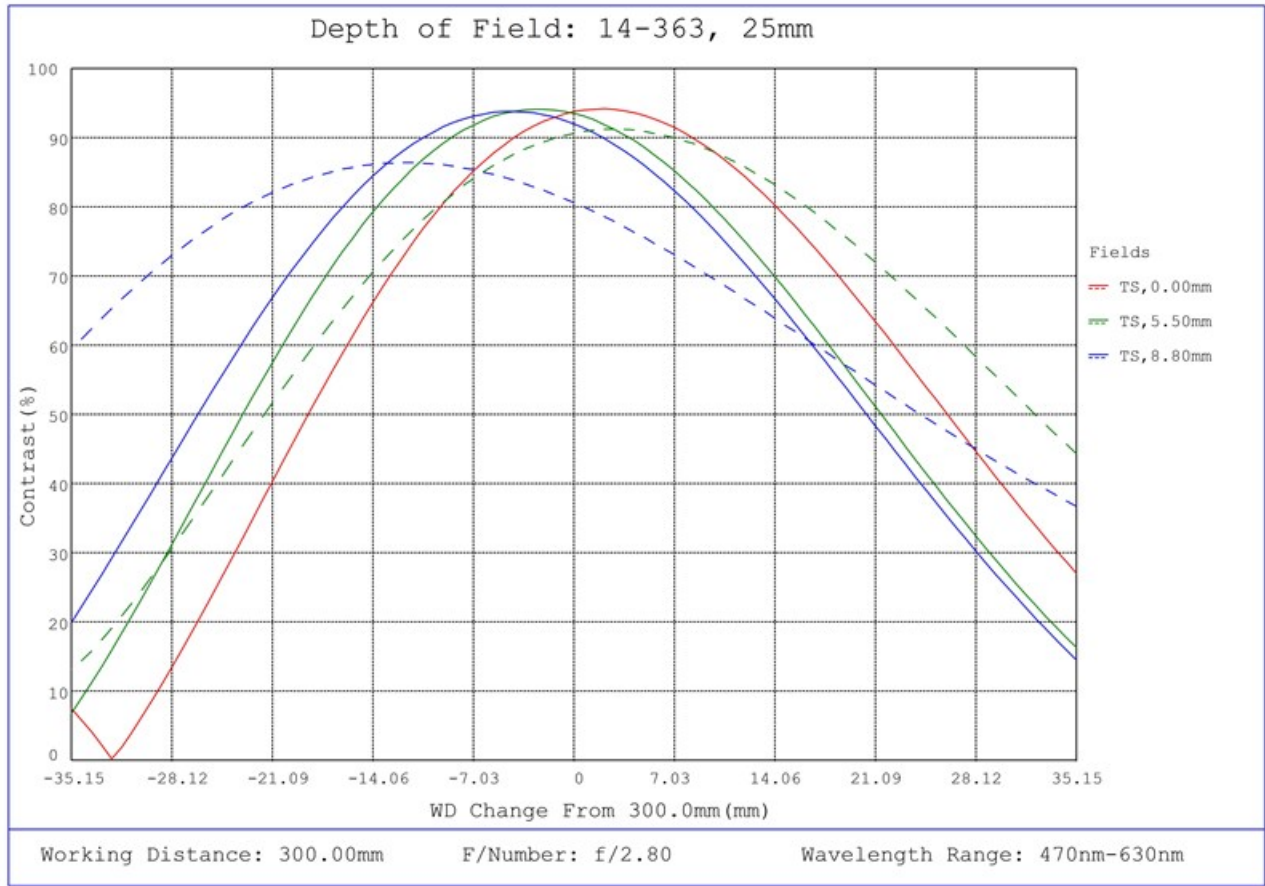
#14-363, 25mm LT Series Fixed Focal Length Lens, Relative Illumination Plot



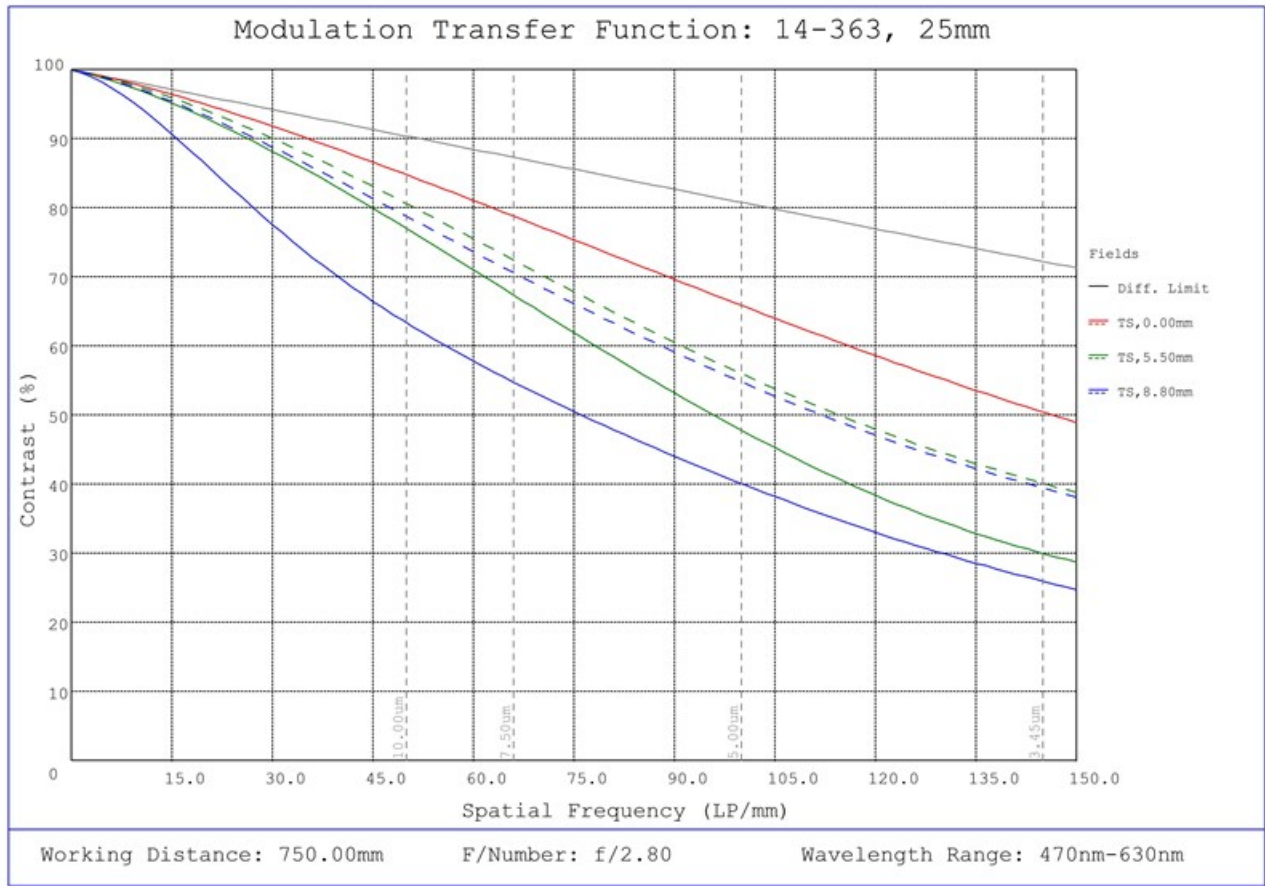
#14-363, 25mm LT Series Fixed Focal Length Lens, Working Distance versus Field of View Plot



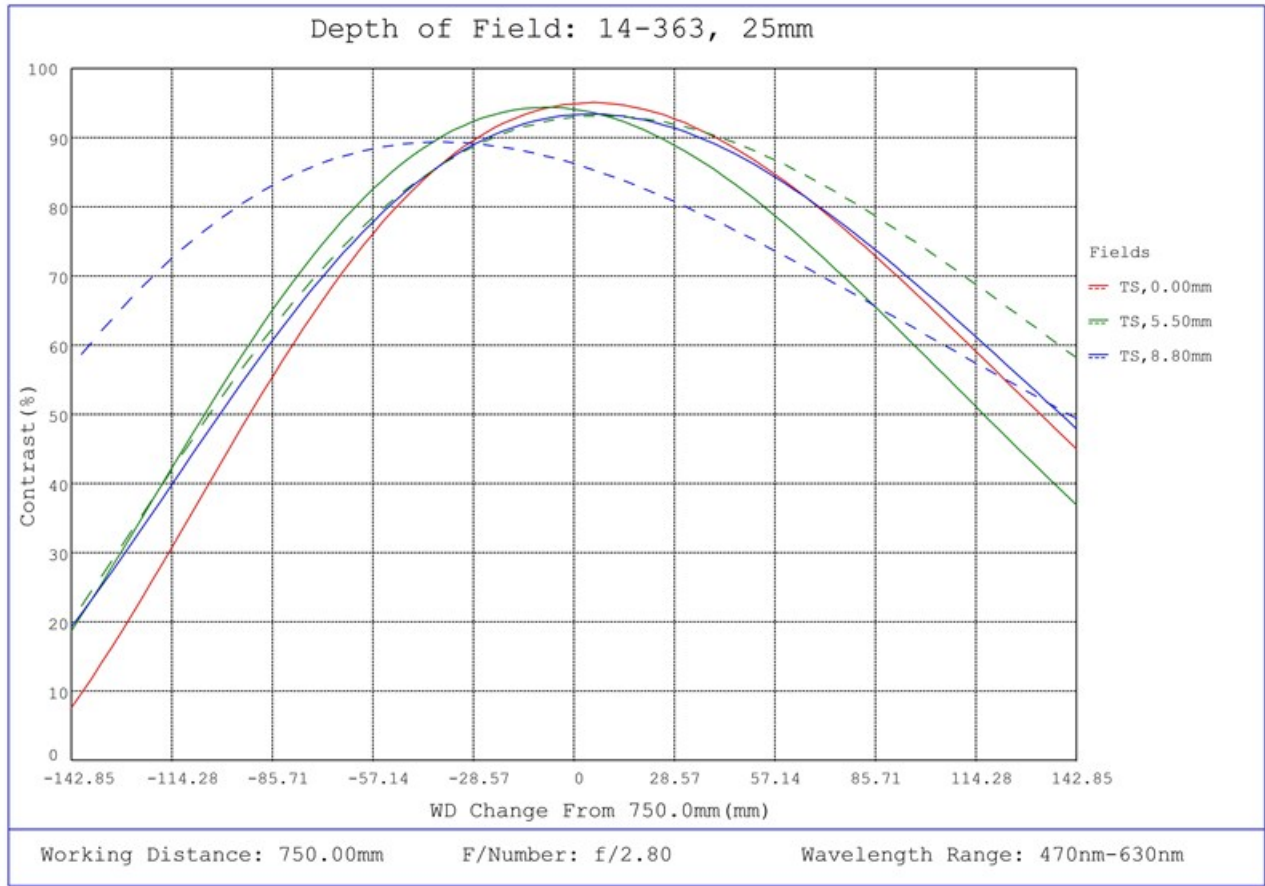
#14-363, 25mm LT Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 300mm Working Distance, f2.8



#14-363, 25mm LT Series Fixed Focal Length Lens, Depth of Field Plot, 300mm Working Distance, f2.8



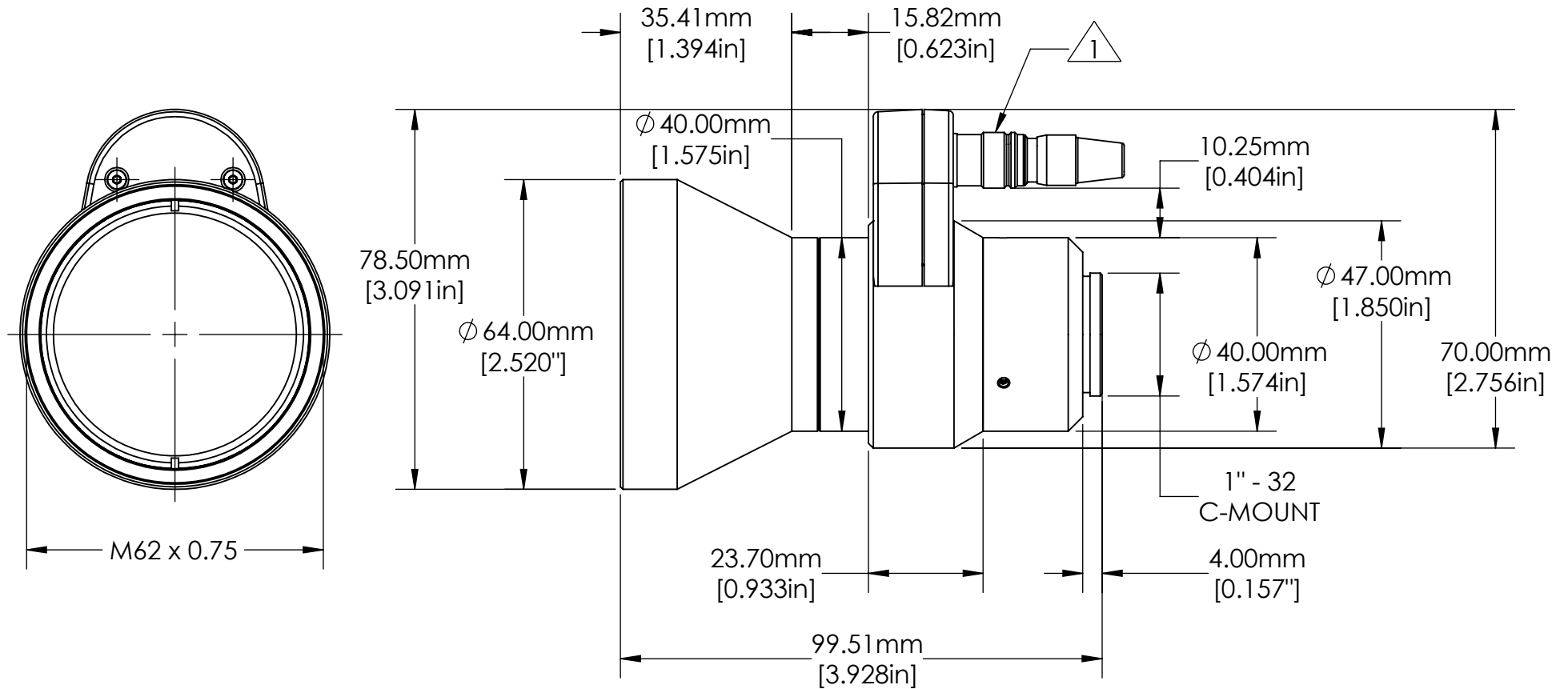
#14-363, 25mm LT Series Fixed Focal Length Lens, Modulated Transfer Function (MTF) Plot, 750mm Working Distance, f2.8



#14-363, 25mm LT Series Fixed Focal Length Lens, Depth of Field Plot, 750mm Working Distance, f2.8

NOTES:

1. HIROSE CONNECTOR FOR LIQUID LENS NOT INCLUDED



SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE
 DIMENSIONS ARE FOR REFERENCE ONLY

**FOR INFORMATION ONLY:
 DO NOT MANUFACTURE
 PARTS TO THIS DRAWING**

Edmund Optics®

THIRD ANGLE PROJECTION		TITLE	25mm LT SERIES FIXED FOCAL LENGTH LENS	
ALL DIMS IN	mm	DWG NO	14363	SHEET 1 OF 1



March 24, 2023

To Whom It May Concern,

This document certifies that the product stated below has been reviewed as requested by Edmund Optics:

<i>Stock No.</i>	<i>Description</i>
14-363	25mm LT Series Fixed Focal Length Lens

This item is EU RoHS (2011/65/EU) compliant without the use of exemptions.

This certification means that:

- EO's suppliers have confirmed the material composition of this product.
- EO has implemented rigorous procedures to document this compliance.
- The information provided may, or may not, be based upon actual test data, or on information from our Vendors, Raw Material Suppliers or Subcontractors.

A handwritten signature in cursive script, appearing to read 'Jay Budd'.

Jay Budd, Director of Corporate Compliance

March 24, 2023

Edmund Optics Inc. - 101 E Gloucester Pike, Barrington, NJ 08007 | 1-800-363-1992 | Compliance@edmundoptics.com



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<i>Stock No.</i>	<i>Description</i>
14-363	25mm LT Series Fixed Focal Length Lens

Edmund Optics certifies that all articles included in this shipment are in compliance with the terms and conditions of this order. The company also certifies that the articles included in this shipment are in accordance to all agreed upon specifications and quality assurance provisions. Please call 1-800-363-1992 should any questions arise from this shipment.

A handwritten signature in cursive script that reads 'Robert M. Henderson'.

Robert Henderson - Director of Quality