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**TECHSPEC® 1.0X SilverTL™ Telecentric Lens**



1.0X Magnification



Stock #58-430 **13 In Stock**

⊖ 1 ⊕ €1.125<sup>00</sup>

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Volume Pricing	
Qty 1+	€1.125,00 each
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

**General**

SilverTL™ Series **Product Family:**

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

Telecentric Lens **Type:**

## Physical & Mechanical Properties

Variable	Iris Option:
114.00	Length (mm):
114.00	Length excluding Threads (mm):
40.00	Maximum Diameter (mm):
193	Weight (g):
Anodized Aluminum	Construction:

## Optical Properties

8.8mm	Horizontal Field of View, 2/3" Sensor:
6.4mm	Horizontal Field of View, 1/2" Sensor:
4.8mm	Horizontal Field of View, 1/3" Sensor:
11.00	Maximum Image Circle (mm):
0.082	Numerical Aperture NA, Object Side:
±3	Working Distance Tolerance (mm):
>40% @ 40 lp/mm	Resolution, Image Space MTF @ f/10:
6 (5)	Number of Elements (Groups):
<0.045	Typical Telecentricity @ 588nm (°):
<0.060	Typical Distortion @ 588nm (%):
1X	Primary Magnification PMAG:
1.00	Telecentric Lens Magnification:
83.00	Working Distance (mm):
8.8 x 6.6	FOV @ Max Sensor Format, H x V (mm):
f/6 - f/22	Aperture (f/#):
425 - 675nm BBAR	Coating:
±0.5 at f/10 (20% @ 20 lp/mm)	Depth of Field (mm):
1X	Magnification:
VIS	Lens Wavelength Range:

## Sensor

2/3"	Maximum Sensor Format:
2.74	Pixel Size (µm):

## Threading & Mounting

M37 x 0.75 (Female)	Filter Thread:
C-Mount	Mount:

## Regulatory Compliance

<a href="#">Compliant</a>	RoHS 2015:
<a href="#">View</a>	Certificate of Conformance:
<a href="#">Compliant</a>	REACH 241:

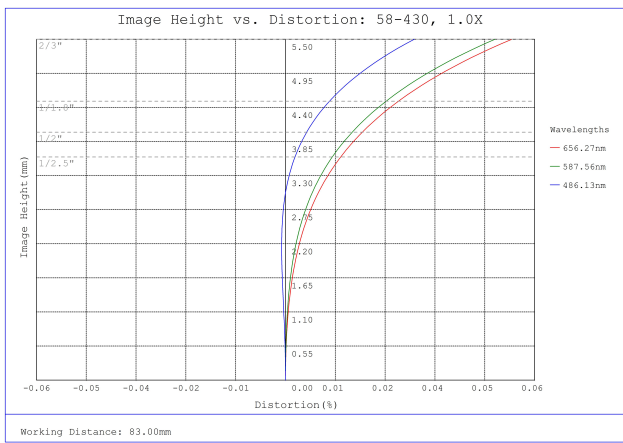
## Product Details

- High Resolution f/6 Bi-Telecentric Lens with Inline Illumination Options
- Up to 7.5 MegaPixels, 2.8 $\mu$ m Pixel Size Sensors
- Up to 2/3", C-Mount Telecentric Lens
- Magnification from 0.16X to 4X

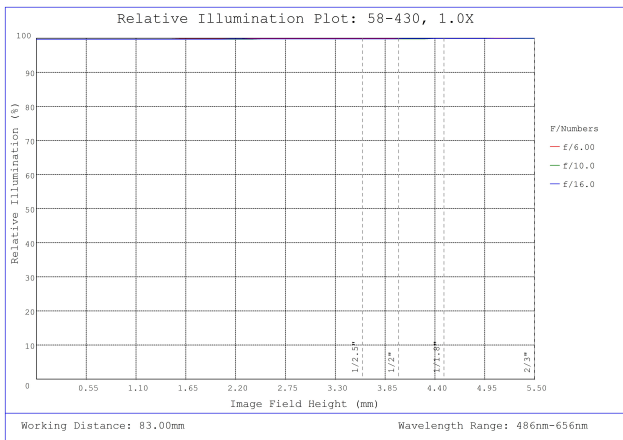
TECHSPEC® SilverTL™ Telecentric Lenses are ideal for both on-line and off-line machine vision production applications that require accurate measurements. These lenses combine high-quality optics with a simplified non-focusing mechanical design and an adjustable iris with a locking set screw. These lenses are designed for metrology and gauging applications. TECHSPEC® SilverTL™ Telecentric Lenses also offer inline illumination options for maximum versatility. Each lens also features a standard front filter thread for use with [color filters](#), [polarizers](#), [protective windows](#), and [illumination adapters](#) for LED or fiber-optic ring lights.

**Note:** Mounting brackets are available that fit the 30mm diameter mounting surface.

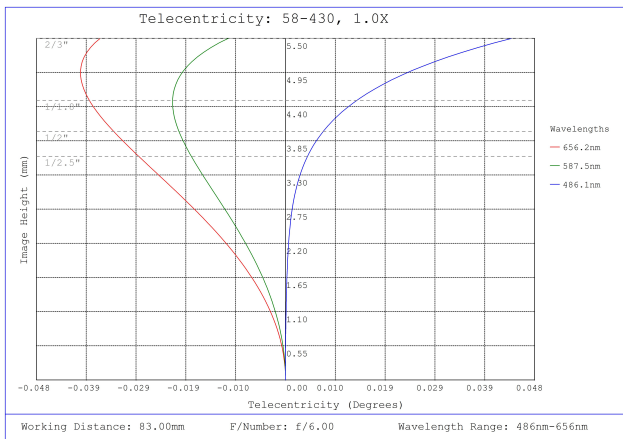
## Technical Information



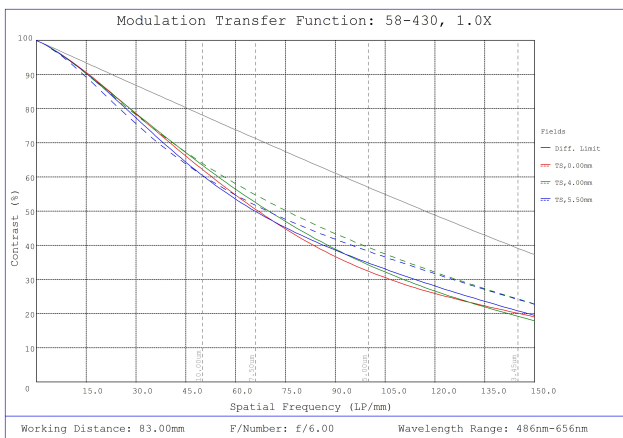
#58-430, 1.0X SilverTL™ Telecentric Lens, Distortion Plot



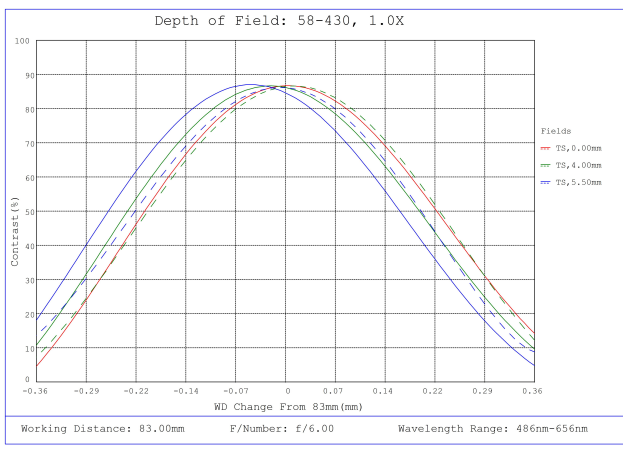
#58-430, 1.0X SilverTL™ Telecentric Lens, Relative Illumination Plot



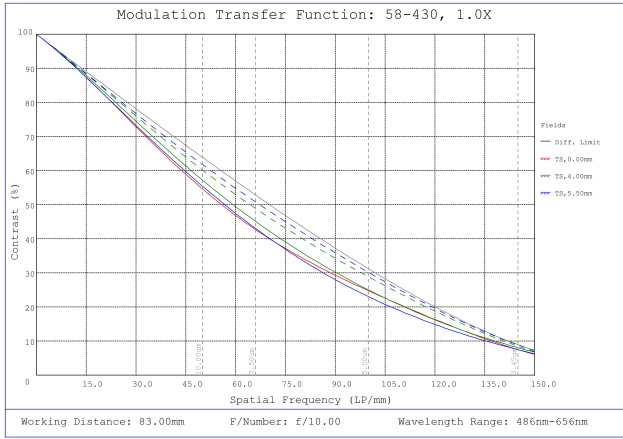
#58-430, 1.0X SilverTL™ Telecentric Lens, Telecentricity Plot



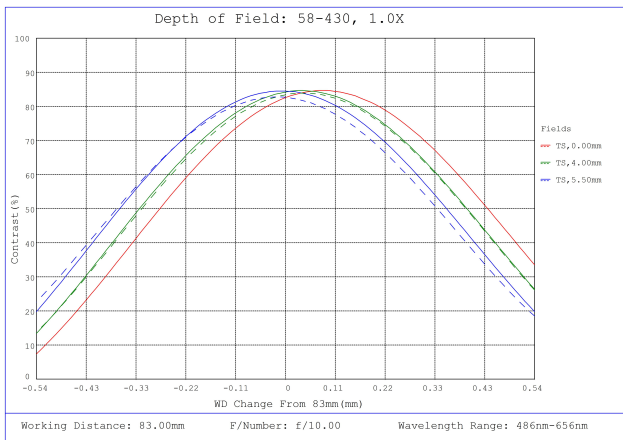
#58-430, 1.0X SilverTL™ Telecentric Lens, Modulated Transfer Function (MTF) Plot, 83mm Working Distance, f6



#58-430, 1.0X SilverTL™ Telecentric Lens, Depth of Field Plot, 83mm Working Distance, f6



#58-430, 1.0X SilverTL™ Telecentric Lens, Modulated Transfer Function (MTF) Plot, 83mm Working Distance, f10



#58-430, 1.0X SilverTL™ Telecentric Lens, Depth of Field Plot, 83mm Working Distance, f10

Stock Number	Primary Mag.	Max. Diameter A	Mounting Diameter B	Length C	Mounting Length D	Mounting Offset E	Filter Thread F
#56-675	0.16X	65mm	30mm	191mm	50mm	43mm	M62 x 0.75
#63-073	0.20X	60mm	30mm	188mm	42mm	45mm	M58 x 0.75
#56-676	0.25X	48mm	30mm	158mm	49mm	44mm	M46 x 0.75
#58-428	0.30X	46mm	30mm	158mm	60mm	43mm	M43 x 0.75
#56-677	0.40X	45mm	30mm	159mm	67mm	33mm	M43 x 0.75
#63-074	0.50X	40mm	30mm	153mm	42mm	68mm	M37 x 0.75
#88-344 (In-Line)				156.2mm	45.1mm	73.4mm	
#56-678	0.60X	42mm	30mm	156mm	57mm	46mm	M40.5 x 0.5
#67-731	0.75X	36mm	30mm	151.2mm	34mm*	82.2mm	M30.5 x 0.5
#88-346 (In-Line)				155.2mm	46.2mm	16.9mm	
#58-430	1.0X	40mm	30mm	114mm	32mm*	17mm	M37 x 0.75
#58-431	2.0X	45mm	30mm	141mm	45mm	17mm	M43 x 0.75
#88-348 (In-Line)				144.6mm	42.2mm	18.8mm	
#58-432	4.0X	61mm	30mm	249mm	99mm	17mm	M58 x 0.75



\*Mounting clamp fits over iris

