

**TECHSPEC® 50mm Dia. x 100mm FL, VIS-NIR, Inked, Achromatic Lens**



Stock **#49-390-INK** **4 In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ £184.<sup>00</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-5	£184.80 each
Qty 6-25	£148.00 each
Qty 26-49	£139.20 each
Need More?	<a href="#">Request Quote</a>

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

**General**

Achromatic Lens **Type:**

**Physical & Mechanical Properties**

50.00 ±0.025	<b>Diameter (mm):</b>
49.00	<b>Clear Aperture CA (mm):</b>
<1	<b>Centering (arcmin):</b>
17.92 ±0.20	<b>Center Thickness CT (mm):</b>
13.92 ±0.10	<b>Center Thickness CT 1 (mm):</b>
4.00 ±0.10	<b>Center Thickness CT 2 (mm):</b>
12.55	<b>Edge Thickness ET (mm):</b>
Protective as needed	<b>Bevel:</b>

## Optical Properties

100.00	<b>Effective Focal Length EFL (mm):</b>
±1	<b>Focal Length Tolerance (%):</b>
89.94	<b>Back Focal Length BFL (mm):</b>
587.6	<b>Focal Length Specification Wavelength (nm):</b>
69.28	<b>Radius R<sub>1</sub> (mm):</b>
-46.95	<b>Radius R<sub>2</sub> (mm):</b>
-446.01	<b>Radius R<sub>3</sub> (mm):</b>
<a href="#">N-BAF10 / N-SF10</a>	<b>Substrate:</b> <input type="checkbox"/>
40-20	<b>Surface Quality:</b>
2.00	<b>f#:</b>
0.25	<b>Numerical Aperture NA:</b>
VIS-NIR (400-1000nm)	<b>Coating:</b>
R <sub>abs</sub> ≤0.25% @ 880nm R <sub>avg</sub> ≤1.25% @ 400 - 870nm R <sub>avg</sub> ≤1.25% @ 890 - 1000nm	<b>Coating Specification:</b>
1.5λ	<b>Power (P-V) @ 632.8nm:</b>
λ/4	<b>Irregularity (P-V) @ 632.8nm:</b>
400 - 1000	<b>Wavelength Range (nm):</b>

## Regulatory Compliance

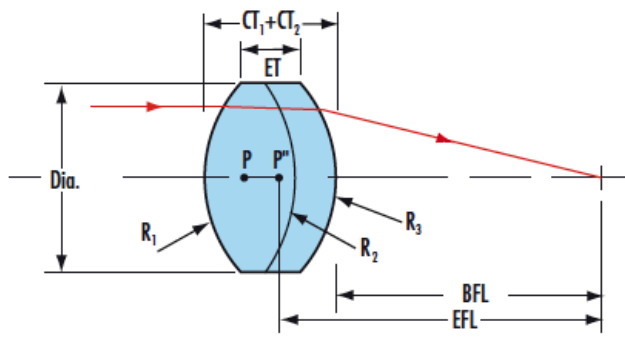
<a href="#">Compliant</a>	<b>RoHS 2015:</b>
<a href="#">Compliant</a>	<b>REACH 201:</b>
<a href="#">View</a>	<b>Certificate of Conformance:</b>

## Product Details

- Designed for 0° Angle of Incidence
- Less Than 0.25% Reflectance Per Surface @ 880nm
- [MgF<sub>2</sub>](#) and [VIS 0°](#) Coated Achromats Also Available

TECHSPEC® VIS-NIR Coated Achromatic Lenses consist of two optical components cemented together to form an achromatic doublet. The doublet is computer optimized to correct for on-axis spherical and chromatic aberrations. TECHSPEC® VIS-NIR Coated Achromatic Lenses have visible/near-infrared broadband anti-reflection coating, which is specially optimized to yield maximum transmission (>99%) in the near-infrared. The achromatic lenses reduce reflection to less than 0.25 percent per surface at 880nm. [Magnesium Fluoride](#) coated and [VIS 0°](#) coated achromats are also available.

## Technical Information



## Coating Curves

### Custom

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

## Compatible Mounts