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TECHSPEC<sup>®</sup> 12.5mm Dia. x 50mm FL, VIS-NIR Coated, Achromatic Lens



Stock **#49-328** 20+ In Stock

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-

1

+

€96<sup>.50</sup>

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | €96,50 each                   |
| Qty 6-25       | €77,00 each                   |
| Qty 26-49      | €72,50 each                   |
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Product Downloads

General

Achromatic Lens

Type:

Physical & Mechanical Properties

|                      |                             |
|----------------------|-----------------------------|
| 12.50 +0.0/-0.025    | Diameter (mm):              |
| 11.50                | Clear Aperture CA (mm):     |
| <1                   | Centering (arcmin):         |
| 5.00 ±0.10           | Center Thickness CT (mm):   |
| 3.50 ±0.05           | Center Thickness CT 1 (mm): |
| 1.50 ±0.05           | Center Thickness CT 2 (mm): |
| 4.06                 | Edge Thickness ET (mm):     |
| Protective as needed | Bevel:                      |

|                                                                                                                    |                                             |
|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Optical Properties                                                                                                 |                                             |
| 50.00                                                                                                              | Effective Focal Length EFL (mm):            |
| ±1                                                                                                                 | Focal Length Tolerance (%):                 |
| 47.61                                                                                                              | Back Focal Length BFL (mm):                 |
| 587.6                                                                                                              | Focal Length Specification Wavelength (nm): |
| 30.73                                                                                                              | Radius R <sub>1</sub> (mm):                 |
| -22.32                                                                                                             | Radius R <sub>2</sub> (mm):                 |
| -64.75                                                                                                             | Radius R <sub>3</sub> (mm):                 |
| N-BK7 / N-SF5                                                                                                      | Substrate: <input type="checkbox"/>         |
| 40-20                                                                                                              | Surface Quality:                            |
| 4.00                                                                                                               | f/#:                                        |
| 0.13                                                                                                               | Numerical Aperture NA:                      |
| VIS-NIR (400-1000nm)                                                                                               | Coating:                                    |
| R <sub>abs</sub> ≤0.25% @ 880nm<br>R <sub>avg</sub> ≤1.25% @ 400 - 870nm<br>R <sub>avg</sub> ≤1.25% @ 890 - 1000nm | Coating Specification:                      |
| 1.5λ                                                                                                               | Power (P-V) @ 632.8nm:                      |
| λ/4                                                                                                                | Irregularity (P-V) @ 632.8nm:               |
| 400 - 1000                                                                                                         | Wavelength Range (nm):                      |

|                       |                             |
|-----------------------|-----------------------------|
| Regulatory Compliance |                             |
| Compliant             | RoHS 2015:                  |
| View                  | Certificate of Conformance: |
| Compliant             | REACH 241:                  |

## 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