

TECHSPEC® 12.7mm Dia. x 44.5mm FL, VIS 0° Coated, Achromatic Lens



Stock **#49-776** **20+ In Stock**

[Other Coating Options](#)

⊖ 1 ⊕ C\$128¹⁰

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Volume Pricing	
Qty 1-5	C\$128.10 each
Qty 6-25	C\$102.20 each
Qty 26-49	C\$95.90 each
Need More?	Request Quote

Product Downloads

General

Achromatic Lens **Type:**

Physical & Mechanical Properties

12.70 +0.0/-0.025 **Diameter (mm):**

11.70	Clear Aperture CA (mm):
<1	Centering (arcmin):
5.00 ±0.20	Center Thickness CT (mm):
3.00 ±0.10	Center Thickness CT 1 (mm):
2.00 ±0.10	Center Thickness CT 2 (mm):
4.04	Edge Thickness ET (mm):
Protective as needed	Bevel:

Optical Properties

44.45	Effective Focal Length EFL (mm):
±1	Focal Length Tolerance (%):
41.98	Back Focal Length BFL (mm):
587.6	Focal Length Specification Wavelength (nm):
28.49	Radius R ₁ (mm):
-20.03	Radius R ₂ (mm):
-81.41	Radius R ₃ (mm):
N-BAK1 / N-SF8	Substrate: □
40-20	Surface Quality:
3.5	f#:
0.14	Numerical Aperture NA:
VIS 0° (425-675nm)	Coating:
R _{avg} ≤0.4% @ 425 - 675nm	Coating Specification:
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:
425 - 675	Wavelength Range (nm):

Regulatory Compliance

Compliant	Reach 181:
Compliant	RoHS 2015:
View	Certificate of Conformance:

Need different specs or modifications?

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](#).

Product Details

- Designed for 0° Angle of Incidence
- Less Than 0.4% Reflectance Per Surface from 425 - 675nm

- [MgF₂](#) and [VIS-NIR](#) Coated Achromats Also Available

TECHSPEC® VIS 0° 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. Achromatic lenses are best for applications involving multi-color (white light) imaging due to their specific doublet lens pairing that enables them to correct the color separation inherent in glass. TECHSPEC® VIS 0° Coated Achromatic Lenses provide optimized transmission for 425 – 675nm, reducing average reflection to 0.4%. [MgF₂](#) and [VIS-NIR](#) Coated Achromats are also available on our website.

Technical Information



Coating Curves

Compatible Mounts