

TECHSPEC® 50mm Dia. x 150mm FL Uncoated Calcium Fluoride PCX Lens



TECHSPEC Calcium Fluoride Plano-Convex (PCX) Lenses

Stock #88-169 **20+ In Stock**

⊖ 1 ⊕ £424.⁰⁰

ADD TO CART

Volume Pricing	
Qty 1-5	£424.00 each
Qty 6-25	£338.40 each
Qty 26-49	£316.80 each
Need More?	Request Quote

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Plano-Convex Lens **Type:**

Physical & Mechanical Properties

50.00 +0.00/-0.10 **Diameter (mm):**

Centering (arcmin):

<3

Center Thickness CT (mm):

7.00 ±0.1

Edge Thickness ET (mm):

2.33

Clear Aperture CA (mm):

45

Bevel:

Protective as needed

Optical Properties

Effective Focal Length EFL (mm):

150.00 @266nm

Back Focal Length BFL (mm):

145.21

Coating:

Uncoated

Substrate:

Calcium Fluoride (CaF₂)

Surface Quality:

40-20

Power (P-V) @ 632.8nm:

λ

Irregularity (P-V) @ 632.8nm:

3λ/2

Radius R₁ (mm):

69.31

f/#:

3.00

Numerical Aperture NA:

0.17

Wavelength Range (nm):

200 - 7000

Axis Orientation:

Random

Regulatory Compliance

RoHS 2015:

[Compliant](#)

Reach 219:

[Compliant](#)

Certificate of Conformance:

[View](#)

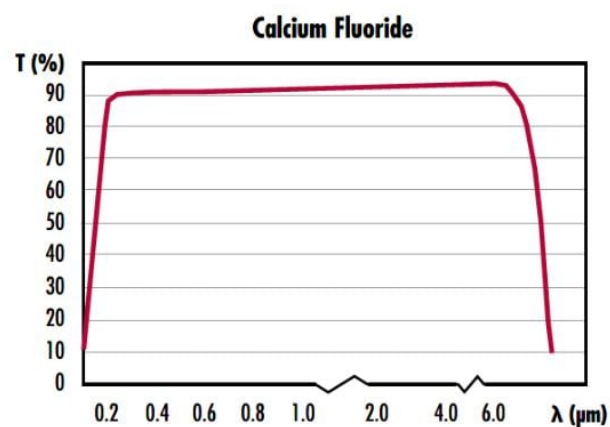
Product Details

- Low Index of Refraction
- Vacuum Grade UV Substrate
- Uncoated, VIS-NIR, and NIR II Broadband AR Coating Options

TECHSPEC® Calcium Fluoride Plano-Convex Lenses are ideal for demanding applications that require superior performance from the ultraviolet through the mid-wave infrared spectra. The lenses' low refractive index, high laser damage threshold, and low axial and radial-stress birefringence are highly suitable for use with Excimer lasers or for integration into infrared systems. Additionally, calcium fluoride features low solubility and offers superior hardness to comparable fluoride-based substrates, making these PCX lenses capable of withstanding harsh environments and exposure to the elements. TECHSPEC® Calcium Fluoride Plano-Convex Lenses are offered in 12.5mm, 25mm, and 50mm diameters. The lenses are available uncoated, VIS-NIR, or with NIR II broadband AR coating options.

Note: Calcium fluoride is a relatively soft optical material and requires careful handling as it is very easily scratched. Calcium fluoride is also susceptible to thermal shock.

Technical Information



Special Handling

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our [Optics Cleaning Resources](#) for step-by-step guides and best practices. For personalized assistance, [Email us](#) or [Chat](#) with our technical support team.



Component Handling Tools

Compatible Mounts
