

[See all 30 Products in Family](#)

TECHSPEC® 12.5mm Dia. x 50mm FL Uncoated Calcium Fluoride PCX Lens



TECHSPEC Calcium Fluoride Plano-Convex (PCX) Lenses

Stock **#88-162** **15 In Stock**

⊖ 1 ⊕ €174⁰⁰

ADD TO CART

Volume Pricing	
Qty 1-5	€174,00 each
Qty 6-25	€139,00 each
Qty 26-49	€130,00 each
Need More?	Request Quote

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Plano-Convex Lens **Type:**

Physical & Mechanical Properties

12.50 +0.00/-0.10 **Diameter (mm):**

Centering (arcmin):

<3

Center Thickness CT (mm):

2.00 ±0.1

Edge Thickness ET (mm):

1.14

Clear Aperture CA (mm):

11.25

Bevel:

Protective as needed

Optical Properties

Effective Focal Length EFL (mm):

50.00 @ 266nm

Back Focal Length BFL (mm):

48.63

Coating:

Uncoated

Substrate:

Calcium Fluoride (CaF₂)

Surface Quality:

40-20

Power (P-V) @ 632.8nm:

λ

Irregularity (P-V) @ 632.8nm:

λ/2

Radius R₁ (mm):

23.11

f#:

4.00

Numerical Aperture NA:

0.13

Wavelength Range (nm):

200 - 7000

Axis Orientation:

Random

Regulatory Compliance

RoHS 2015:

[Compliant](#)

Reach 219:

[Compliant](#)

Certificate of Conformance:

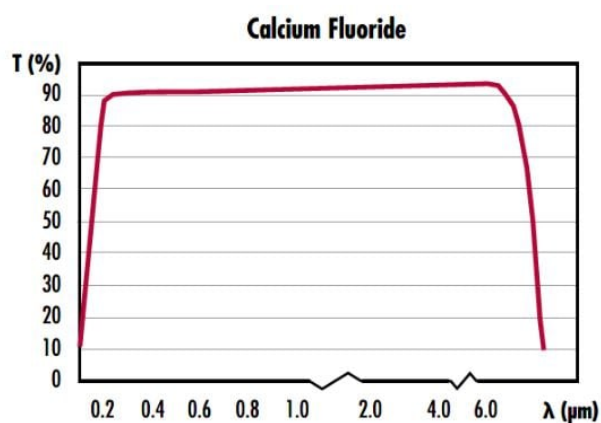
[View](#)

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.

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
