

**TECHSPEC® 50mm Dia. x 100mm FL VIS-NIR Coated Calcium Fluoride PCX Lens**



TECHSPEC Calcium Fluoride Plano-Convex (PCX) Lenses

Stock #22-523 **3 In Stock**

⊖ 1 ⊕ €580.<sup>00</sup>

**ADD TO CART**

Volume Pricing	
Qty 1-5	€580,00 each
Qty 6-25	€463,00 each
Qty 26-49	€435,00 each
Need More?	<a href="#">Request Quote</a>

ⓘ 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):**

Center Thickness CT (mm):

9.00 ±0.1

Edge Thickness ET (mm):

1.65

Clear Aperture CA (mm):

48

Bevel:

Protective as needed

### Optical Properties

Effective Focal Length EFL (mm):

100.00 @266nm

Back Focal Length BFL (mm):

93.85

Coating:

VIS-NIR (400-1000nm)

Substrate:

Calcium Fluoride (CaF<sub>2</sub>)

Surface Quality:

40-20

Power (P-V) @ 632.8nm:

λ

Irregularity (P-V) @ 632.8nm:

3λ/2

Radius R<sub>1</sub> (mm):

46.21

f/#:

2.00

Numerical Aperture NA:

0.25

Wavelength Range (nm):

200 - 7000

Axis Orientation:

Random

### Regulatory Compliance

RoHS 2015:

[Compliant](#)

Certificate of Conformance:

[View](#)

Reach 235:

[Compliant](#)

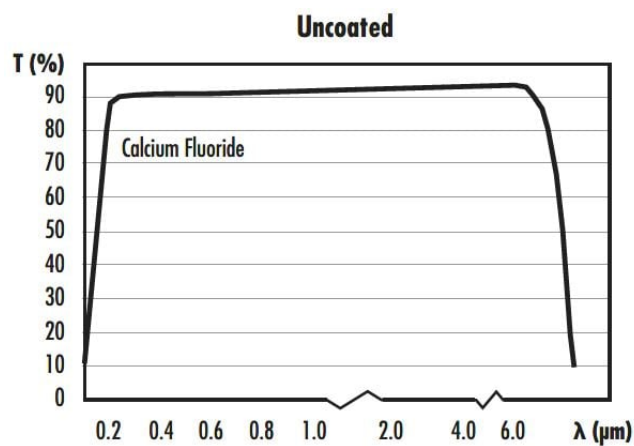
## Product Details

- 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

## Coating Curves

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