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TECHSPEC® 50mm Dia. x 100mm FL Uncoated Calcium Fluoride PCX Lens



TECHSPEC Calcium Fluoride Plano-Convex (PCX) Lenses

Stock **#88-168** **5 In Stock**

⊖ 1 ⊕ **S\$742⁰⁰**

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Volume Pricing	
Qty 1-5	S\$742.00 each
Qty 6-25	S\$592.20 each
Qty 26-49	S\$554.40 each
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Product Downloads

General

Plano-Convex Lens **Type:**

Physical & Mechanical Properties

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

<3 **Centering (arcmin):**

Center Thickness CT (mm):
9.00 ±0.1

Edge Thickness ET (mm):
1.65

Clear Aperture CA (mm):
45

Bevel:
Protective as needed

Optical Properties

Effective Focal Length EFL (mm):
100.00 @266nm

Back Focal Length BFL (mm):
93.85

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):
46.21

f#:
2.00

Numerical Aperture NA:
0.25

Wavelength Range (nm):
200 - 7000

Axis Orientation:
Random

Regulatory Compliance

RoHS 2015:
[Compliant](#)

Reach 219:
[Compliant](#)

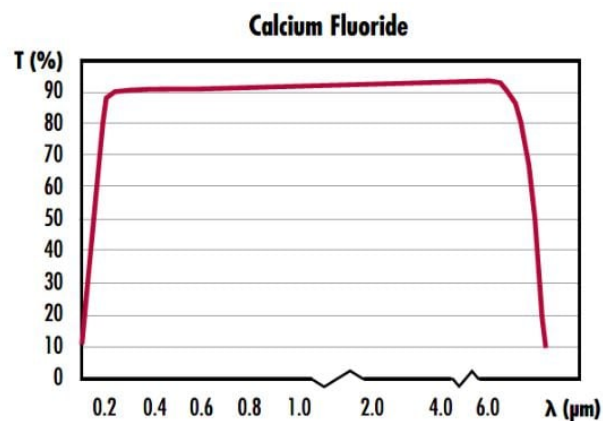
Certificate of Conformance:
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Product Details

- 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
