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**TECHSPEC®**

25mm Dia. x 50mm F

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PCX Lens



TECHSPEC Calcium Fluoride Plano-Convex (PCX) Lenses

Stock #88-164 10 In Stock

1

€210<sup>.00</sup>

ADD TO CART

Volume Pricing	
Qty 1-5	€210,00 each
Qty 6-25	€168,00 each
Qty 26-49	€158,00 each
Need More?	<a href="#">Request Quote</a>

Product Downloads	
STEP:step	PDF Drawing:pdf
IGES:igs	Zemax:zar
Zemax:zmx	eDrawing:eprt
Code V:seq	EO Spec Sheet
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Prices shown are exclusive of VAT/local taxes

**General**

Type: Plano-Convex Lens

**Physical & Mechanical Properties**

Diameter (mm): 25.00 +0.00/-0.10

Centering (arcmin): <3

Center Thickness CT (mm): 5.00 ±0.1

Edge Thickness ET (mm): 1.33

Clear Aperture CA (mm): 22.5

Bevel: Protective as needed

**Optical Properties**

Effective Focal Length EFL (mm): 50.00 @ 266nm

Back Focal Length BFL (mm): 46.58

Coating: Uncoated

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

Surface Quality: 40-20

Power (P-V) @ 632.8nm: λ

Irregularity (P-V) @ 632.8nm: λ/2

Radius R<sub>1</sub> (mm): 23.11

f/#: 2.00

Numerical Aperture NA: 0.25

Wavelength Range (nm): 200 - 7000

Axis Orientation: Random

**Regulatory Compliance**

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## Product Details

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

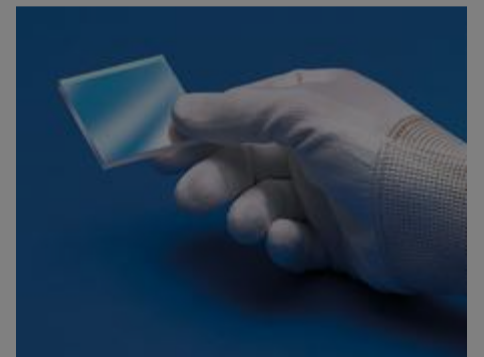
TECHSPEC® Calcium Fluoride Plano-Convex Lenses are ideal for demanding applications that require superior performance from the ultraviolet through the mid-wave infrared spectra. The lenses' low refractive index, high laser damage threshold, and low axial and radial-stress birefringence are highly suitable 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.

**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

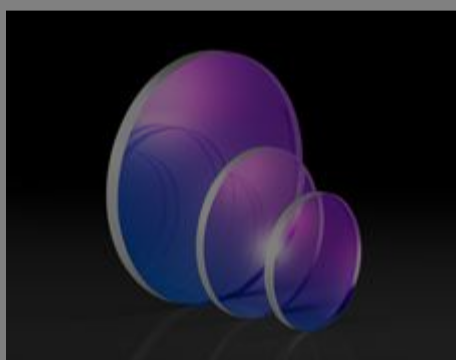
### Special Handling

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.

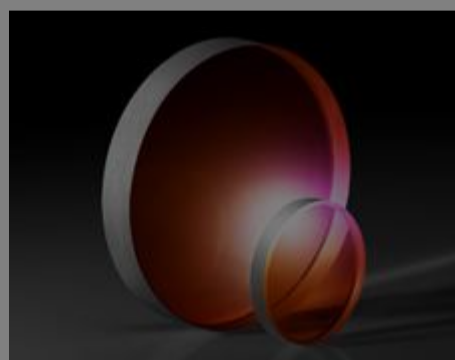


**Component Handling Tools**

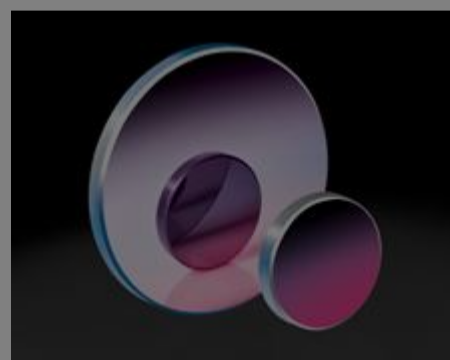
### Related Products



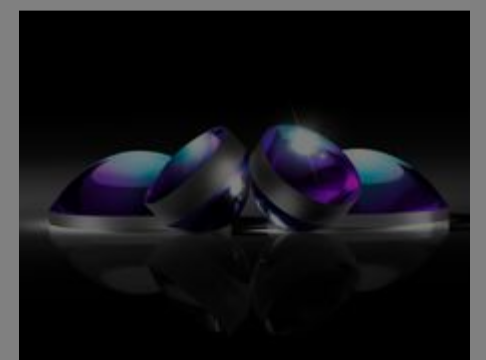
Calcium Fluoride (CaF<sub>2</sub>) Windows



ISP Optics Calcium Fluoride (CaF<sub>2</sub>) Wedged Windows



Infrared (IR) Lenses



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

### Frequently Purchased Together



#31-001 - 3 x 3mm, 4-6λ Mirror  
**€8,50**



#31-004 - 9 x 9mm, 4-6λ Mirror  
**€19,00**



#32-311 - 12.5mm Dia. x 25mm FL, MgF<sub>2</sub> Coated, Achromatic Doublet Lens  
**€86,00**



#32-354 - 6.3mm Diameter, 4-6λ Mirror  
**€17,25**



Qty















Qty



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	Title					Buy
	 25.0mm Optic Dia., Optic Mount	Fixed	#64-560	€32,75 Request Quote	3 In Stock	1 
	 25.0/25.4mm Optic Dia., X-Y Translating Optic Mount	Adjustable - Linear (XY)	#62-956	€276,00 Request Quote	2 In Stock	1 
	 25.0/25.4mm Optic Dia., X-Y-Z Translating Optic Mount	Adjustable - Linear (XYZ)	#62-959	€540,00 Request Quote	6 In Stock	1 
	 25.0/25.4mm Optic Dia., 5 Axes Optical Mount	Adjustable - Linear (XYZ) & Tip-Tilt	#13-776	€755,00 Request Quote	2 In Stock	1 

Check out our full selection of mounts [here](#).

## Resources

### Media Type

- Application Note
- Scientific Paper
- Video
- Glossary
- FAQ
- Technical Tool
- Trending in Optics

APPLICATION NOTE

Anti-Reflection (AR) Coatings

APPLICATION NOTE

An Introduction to Optical Coatings

APPLICATION NOTE

Understanding Optical Specifications

APPLICATION NOTE

Lens Geometry Performance Comparison

APPLICATION NOTE

Advantages of Using Meniscus Lenses in...

SCIENTIFIC PAPER

Advantages of using engineered chalcogenide...

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