

# 50.8mm Dia. x 100mm FL, Uncoated, ISP Optics Zinc Selenide (ZnSe) PCX Lens | ZC-PX-50-100

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Zinc Selenide Plano-Convex (PCX) Lenses



Stock **#24-961** CLEARANCE **1 In Stock**

⊖ 1 ⊕ £408<sup>00</sup>

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## Product Downloads

### General

Plano-Convex Lens **Type:**  
ZC-PX-50-100 **Model Number:**

## Physical & Mechanical Properties

50.80 +0.00/-0.13 **Diameter (mm):**

Protective as needed **Bevel:**

4.80 ±0.20 **Center Thickness CT (mm):**

<3 **Centering (arcmin):**

45.72 **Clear Aperture CA (mm):**

2.50 **Edge Thickness ET (mm):**

## Optical Properties

100.00 @ 10.6µm **Effective Focal Length EFL (mm):**

Zinc Selenide (ZnSe), CVD Grade **Substrate:**

1.97 **f#:**

0.25 **Numerical Aperture NA:**

Uncoated **Coating:**

600 - 18000 **Wavelength Range (nm):**

97.78 **Back Focal Length BFL (mm):**

±2 **Focal Length Tolerance (%):**

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

60-40 **Surface Quality:**

λ/20 **Irregularity (P-V) @ 10.6µm:**

## Regulatory Compliance

[Compliant](#) **RoHS 2015:**

[View](#) **Certificate of Conformance:**

[Compliant](#) **Reach 240:**

## Product Details

- Low Dispersion and Absorption from 0.6 – 18µm
- High Resistance to Thermal Shock
- Uncoated or BBAR Coated for 8 – 12µm

ISP Optics Zinc Selenide (ZnSe) Plano-Convex (PCX) Lenses are ideal for focusing or collimation of light in the Mid-Wave Infrared (MMIR) and Long-Wave Infrared (LWIR) spectrum. Featuring low absorption and high resistance to thermal shock, ZnSe is widely used in high power CO<sub>2</sub> laser systems. ZnSe is not recommended for harsh environments as it is a relatively soft material that scratches easily, and only has a Knoop Hardness of 120. ISP Optics Zinc Selenide (ZnSe) Plano-Convex (PCX) Lenses are available either uncoated or Broadband Anti-Reflection (BBAR) coated for increased transmission from 8-12µm.

**Note:** Special care should be taken when handling Zinc Selenide as it is a toxic material. Always wear rubber or plastic gloves to avoid risk of contamination.

## 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