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# 38.1mm Dia. x 63.5mm FL, 8-12µm AR Coated, ISP Optics Zinc Selenide (ZnSe) PCX Lens | AR812-ZC-PX-38-63

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Zinc Selenide Plano-Convex (PCX) Lenses



Stock #24-994 **CLEARANCE** 2 In Stock

⊖ 1 ⊕ £280<sup>80</sup>

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#### Volume Pricing

Qty 1+	£280.80 each
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ⓘ Prices shown are exclusive of VAT/local taxes

#### Product Downloads

#### General

Plano-Convex Lens **Type:**

AR812-ZC-PX-38-63 **Model Number:**

## Physical & Mechanical Properties

38.10 +0.00/-0.13 **Diameter (mm):**

Protective as needed **Bevel:**

4.10 ±0.20 **Center Thickness CT (mm):**

<3 **Centering (arcmin):**

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

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

## Optical Properties

63.50 @ 10.6µm **Effective Focal Length EFL (mm):**

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

1.67 **f#:**

0.30 **Numerical Aperture NA:**

BBAR (8000-12000nm) **Coating:**

8000 - 12000 **Wavelength Range (nm):**

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

R<sub>avg</sub> <0.5% @ 8 - 12µm  
R<sub>abs</sub> <1% @ 8 - 12µm **Coating Specification:**

±2 **Focal Length Tolerance (%):**

89.14 **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 (MMR) 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

