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# 38.1mm Dia. x 200mm FL, 8-12µm AR Coated, ISP Optics Zinc Selenide (ZnSe) PCX Lens | AR812-ZC-PX-38-200

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Zinc Selenide Plano-Convex (PCX) Lenses


Stock **#24-999** CLEARANCE **2 In Stock**

- 1 + **€351**,00

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| Qty 1+ | **€351,00** each |
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## General

**Type:**
Plano-Convex Lens

**Model Number:**
AR812-ZC-PX-38-200

## Physical & Mechanical Properties

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

**Bevel:**
Protective as needed

**Center Thickness CT (mm):**
2.60 ±0.20

**Centering (arcmin):**
<3

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

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

## Optical Properties

**Effective Focal Length EFL (mm):**
200.00 @ 10.6µm

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

**f/#:**
5.25

**Numerical Aperture NA:**
0.10

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

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

**Back Focal Length BFL (mm):**
199.39

**Coating Specification:**
$R_{avg}$ <0.5% @ 8 - 12µm
$R_{abs}$ <1% @ 8 - 12µm

**Focal Length Tolerance (%):**
±2

**Radius $R_1$ (mm):**
281.20

**Surface Quality:**
60-40

**Irregularity (P-V) @ 10.6µm:**
λ/20

## Regulatory Compliance

**RoHS 2015:**
Compliant

**Certificate of Conformance:**
View

**Reach 240:**
Compliant

# 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 (MWIR) and Long-Wave Infrared (LWIR) spectrum. Featuring low absorption and high resistance to thermal shock, ZnSe is widely used in high power $CO_2$ 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**

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