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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 + **A$816**.00

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General

Type:
Plano-Convex Lens

Model Number:
ZC-PX-50-100

Physical & Mechanical Properties

Diameter (mm):
50.80 +0.00/-0.13

Bevel:
Protective as needed

Center Thickness CT (mm):
4.80 ±0.20

Centering (arcmin):
<3

Clear Aperture CA (mm):
45.72

Edge Thickness ET (mm):
2.50

Optical Properties

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

Substrate:
Zinc Selenide (ZnSe), CVD Grade

f/#:
1.97

Numerical Aperture NA:
0.25

Coating:
Uncoated

Wavelength Range (nm):
600 - 18000

Back Focal Length BFL (mm):
97.78

Focal Length Tolerance (%):
±2

Radius R_1 (mm):
139.96

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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