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12.7mm Dia. x 5mm Thick Selenide (ZnSe) -50

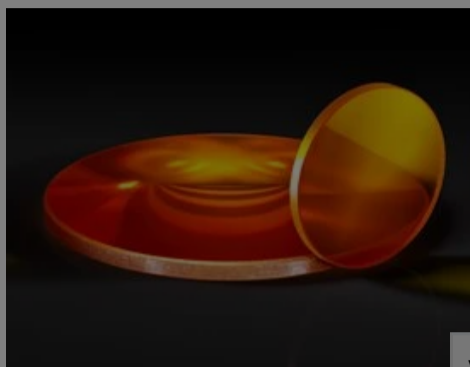
ISP Optics Zinc Selenide (ZnSe) -50

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Stock #24-931 **CLEARANCE** 2 In Stock

1

€420^{,00}

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Product Downloads

- STEP:step
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Prices shown are exclusive of VAT/local taxes

General

Type: Meniscus Lens

Model Number: AR812-ZC-PM-12-50

Physical & Mechanical Properties

Diameter (mm): 12.70
+0.00/-0.13

Center Thickness CT (mm): 1.80 ±0.20

Centering (arcmin): <3

Clear Aperture (%): 90

Clear Aperture CA (mm): 11.43

Edge Thickness ET (mm): 1.50

Optical Properties

Effective Focal Length EFL (mm): 50.80 @ 10.6µm

Substrate: Zinc Selenide (ZnSe), CVD Grade

f/#: 4.00

Numerical Aperture NA: 0.13

Coating: BBAR (8000-12000nm)

Wavelength Range (nm): 8000 - 12000

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

Focal Length Tolerance (%): ±2

Radius R₁ (mm): 107.65

Radius R₂ (mm): 42.85

Surface Quality: 60-40

Irregularity (P-V) @ 10.6µm: λ/20

Regulatory Compliance

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Product Details

- Positive or Negative Meniscus Lenses
- CVD Grade Zinc Selenide (ZnSe) Ideal for CO₂ Systems
- Uncoated or BBAR Coated for 8 – 12µm

ISP Optics Zinc Selenide (ZnSe) Meniscus Lenses feature positive and negative meniscus designs that minimize spherical aberration. Positive meniscus lenses enable smaller spot sizes than possible with PCX lenses, making them ideal for use in CO₂ laser applications for precise marking or cutting. Negative meniscus lenses are used to increase the focal length when used with additional lenses, decreasing the numerical aperture of an optical system. ISP Optics Zinc Selenide (ZnSe) Meniscus Lenses are available in standard imperial sizes either uncoated or Broadband Anti-Reflection (BBAR) coated for enhanced transmission from 8 – 12µm.

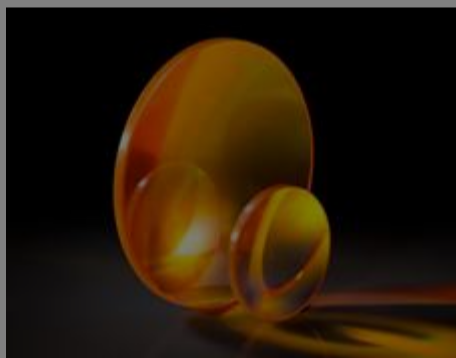
Special Handling

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.

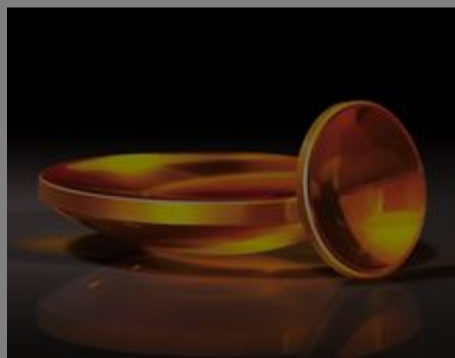


Component Handling Tools

Related Products



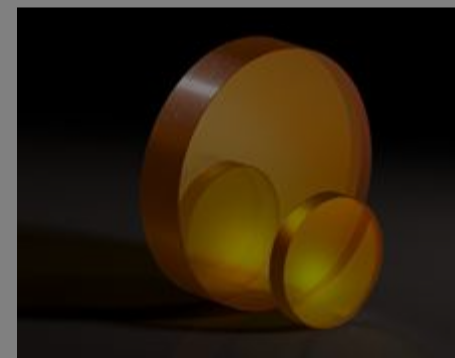
ISP Optics Zinc Selenide (ZnSe) Plano-Convex (PCX) Lenses



Zinc Selenide (ZnSe) Aspheric Lenses



Zinc Selenide (ZnSe) Plano-Convex (PCX) Lenses



Zinc Selenide (ZnSe) Optics

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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