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## 100 μm Aperture Diameter, 0.5" OD Mounted, Precision Pinhole



Unmounted Precision Pinhole



Stock #90-277 **NEW** 2 In Stock

⊖ 1 ⊕ **\$124<sup>00</sup>**

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**General**

Mounted **Type:**

**Physical & Mechanical Properties**

12.7 +0.000/-0.05 **Outer Diameter (mm):**

**Construction:**

Stainless Steel

Fixed Aperture Diameter ( $\mu\text{m}$ ):

100

Thickness (mm):

0.03 Nominal

Aperture Tolerance ( $\mu\text{m}$ ):

$\pm 5$

Aperture Centration ( $\mu\text{m}$ ):

$\pm 125$

## Threading & Mounting

Mount Thickness (mm):

2.54

## Regulatory Compliance

RoHS 2015:

Compliant

Certificate of Conformance:

[View](#)

Reach 247:

Compliant

## Product Details

- Available in Aperture Mounts for a Secure Mechanical Support
- Pinhole Sized Ranging from 1 to 1,000 Microns
- [High Power Apertures](#) Available

### Unmounted Precision Pinholes

Precision Pinholes are high quality apertures centered to  $\pm 0.002"$  (50 microns). They are constructed of stainless steel and are  $3/8"$  (9.5mm) in diameter. Smaller diameter pinholes will reduce energy throughput, while larger diameter pinholes will pass more spatial noise. Precision pinholes have sizes ranging from 1 to 1,000 microns. Typical applications include leak detection, aerosol studies, holography, fiber optics guides, spatial filtering, research, and more.

Use the [Precision Pinhole Mount](#) to integrate unmounted pinholes into a variety of mechanical components easily.

### Mounted Precision Pinholes

Precision Pinholes are available in aperture mounts for secure mechanical support. The mounts also fit into various optical assemblies. Each 9.5mm diameter pinhole is sealed within a 25mm diameter black-anodized aluminum mount. The mount is clearly labeled with a pinhole aperture diameter for easy identification.

**Note:** Aperture Centering to Mount  $\pm 125$  microns.

Edmund Optics offers a wide selection of precision pinholes for leak detection, aerosol studies, holography, fiber optic guides, spatial filtering, research, and more. These pinholes are available in a range of diameters and are ideal for controlling light propagation. Each pinhole is manufactured using high-accuracy techniques, providing consistent circular aperture geometry and high edge quality. Available in both mounted and unmounted formats, these pinholes support a variety of optical setups, from experimental labs to industrial environments.

## Technical Information

