Optomechanics

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CHAPTERS
Tables/

Mechanics

Optomechanic Devices

Miles

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▼ SECTIONS

Mini Series

Ø1/2" Post

Ø1" Post

Ø1.5" Post

Mounting/Angle

Lab Platforms

Instrument Shelves

Lens Tubes

Cage Systems

Optical Rails

Mirror Mounts

Kinematic Mounts

Fixed Mounts

Translation Mounts

Rotation Mounts

Filter Mounts
V-Mounts

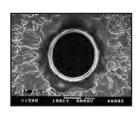
Irises/Apertures

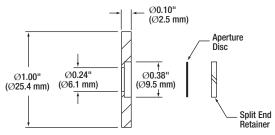
Adapters

Mounted Pinholes

For current pricing, please see our website.







These precision pinholes, which are 12.5 µm thick at the aperture, are ideal for building spatial filters. They are fabricated from 302 non-magnetic stainless steel and are housed in an aluminum housing with a Ø1.00" (Ø25.4 mm) outer diameter.

For many applications, such as holography, spatial intensity variations in the laser beam are unacceptable. Using these precision pinholes in conjunction with precision positioning and focusing equipment such as our Spatial Filter System (see page 198) creates a "noise" filter, effectively stripping variations in intensity out of a Gaussian beam.

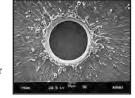
ITEM #	\$		£		€		RMB		DESCRIPTION
P5S	\$	73.00	£	52.56	€	63,51	¥	581.81	Ø5 ± Ø1 μm Mounted Pinhole
P10S	\$	70.00	£	50.40	€	60,90	¥	557.90	Ø10 ± Ø1 μm Mounted Pinhole
P15S	\$	67.00	£	48.24	€	58,29	¥	533.99	Ø15 ± Ø1.5 µm Mounted Pinhole
P20S	\$	63.00	£	45.36	€	54,81	¥	502.11	Ø20 ± Ø2 μm Mounted Pinhole
P25S	\$	63.00	£	45.36	€	54,81	¥	502.11	Ø25 ± Ø2 μm Mounted Pinhole
P30S	\$	63.00	£	45.36	€	54,81	¥	502.11	Ø30 ± Ø2 µm Mounted Pinhole
P50S	\$	63.00	£	45.36	€	54,81	¥	502.11	Ø50 ± Ø3 µm Mounted Pinhole
P75S	\$	63.00	£	45.36	€	54,81	¥	502.11	Ø75 ± Ø3 μm Mounted Pinhole
P100S	\$	62.00	£	44.64	€	53,94	¥	494.14	Ø100 ± Ø4 μm Mounted Pinhole
P150S	\$	62.00	£	44.64	€	53,94	¥	494.14	Ø150 ± Ø6 μm Mounted Pinhole

High-Power Mounted Pinholes



- Damage Threshold
 - 5 x 105 W/mm², 75 ns Pulse @ 700 nm
 - 1 x 10⁶ W/mm², 10 ns Pulse @ 700 nm
 - 1 x 10⁴ W/mm², CW @ 10.6 μm
- Copper Pinholes, Gold-Plated One Side, Flat Poly Black (98% Emissivity) on the Reverse
- 25 µm Thick at the Aperture
- Ø1.00" (Ø25.4 mm) Outer Diameter, 0.10" (2.5 mm) Thick

These precision pinholes are designed to withstand high-power CW laser beams with power densities up to 10⁴ W/mm². We recommend aligning the pinhole at low power and increasing the laser output power only after ensuring good throughput.



l	ITEM #	\$		£		€		RMB		DESCRIPTION
ł	P10C	\$	113.00	£	81.36	€	98,31	¥	900.61	Ø10 ± Ø1 μm High-Power Pinhole
l	P25C	\$	113.00	£	81.36	€	98,31	¥	900.61	Ø25 ± Ø2 μm High-Power Pinhole
ł	P50C	\$	113.00	£	81.36	€	98,31	¥	900.61	Ø50 ± Ø3 μm High-Power Pinhole

Have you seen our...

SM1-Compatible Optics

Thorlabs offers an extensive line of optical elements in SM1-compatible (1.035"-40) housings, including mounted Ø1" achromats (visible, NIR, and IR), matched achromatic pairs, neutral density filters (metallic, absorptive, and AR-coated versions), a colored glass filter kit, edgepass filter kits (both longpass and shortpass), and our cube-mounted beamsplitters. The SM1 threading is directly compatible with most of our optomechanical devices and many of our light analysis instruments (i.e., spectrometers, CCD cameras, PMTs, etc.), making it seamless to build customized optical setups.



Neutral Density Filters See Page 827

Achromatic Lenses

See Page 689

ensity

Cube-Mounted Beamsplitters



Achromatic

THORLARS