

### Five-Axis Optical Mounts

- Lockable 5-axis optical positioning
- True gimballed tip/tilt adjustments
- Optional baseplates for slotted hole mounting

For the ultimate in five-axis positioning of lenses and other optics, our five-axis optical positioners provide stable XYZ and gimballed azimuth and elevation adjustment.

The innovative design yields true gimballed positioning about two orthogonal coplanar axes. The five independent axes allow you to control the positioning an optic in any plane along any axis.

Translation in X, Y, azimuth and elevation is accomplished with a high resolution 100-pitch thumb screw. Positioning along the optical axis or Z direction is non-rotational by use of a zoom lever attached to the mount housing. The positioning mechanisms in all three linear axes are lockable to secure your optics position once alignment has been achieved.

We offer five-axis mounts to hold 1/2 inch, 1 inch and 2 inch optics. In addition, the adapters on page 246 may be purchased to mount optics of different diameters. All mounts have inch or metric threaded holes on the bottom to accommodate our post and post holder mounting system. Optional baseplates are offered on page 246 to provide convenient slotted hole mounting configurations.

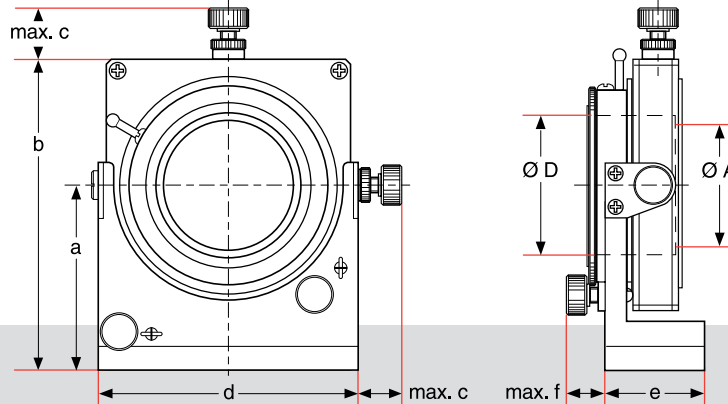


5-axis optical mounts

### Specifications & Tolerances

- Dimensions: ±0.2mm
- Finish: Black anodized
- Material: Aluminum
- Azimuth & elevation per rotation:
  - 39arcmin, 0.5 inch mount
  - 30arcmin, 1 inch mount
  - 22arcmin, 2 inch mount

Part No.	Dimensions (mm)							
	Ø D	Ø A	a	b	c	d	e	f
111-0410/0415	12.7	10	45	71	19.5	56	27	15
111-0420/0425	25.4	22	54	90	21.5	74	28.6	15.5
111-0430/0435	50.8	46	66.7	112.7	21.5	94	36	15.5



5 AXIS LENS HOLDER MOUNT

### 5-Axis Lens Holder Mount

**INCH**      **METRIC**

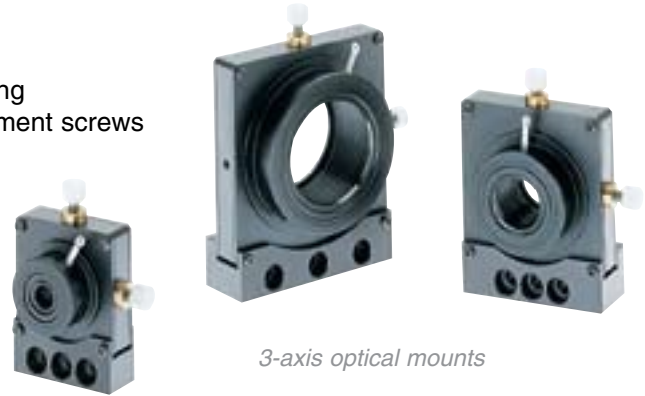
To Hold Lens Diameter, D (inches)	To Hold Lens Diameter, D (mm)	Zoom Range (mm)	Azimuth Range (deg)	Elevation Range (deg)	Price	PART NUMBER	PART NUMBER
0.5	12.7	6	4	10		111-0410	111-0415
1.0	25.4	6	6	8		111-0420	111-0425
2.0	50.8	6	6	6		111-0430	111-0435

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## Three-Axis Optical Mounts

- Lockable 3-axis optical positioning
- High resolution 100-pitch adjustment screws
- Optional baseplates for slotted hole mounting



3-axis optical mounts

For the ultimate in three-axis positioning of lenses and other optics, our three-axis optical positioners provide stable XYZ adjustment. The three independent axes allow you to control the positioning an optic in any plane along each orthogonal axis.

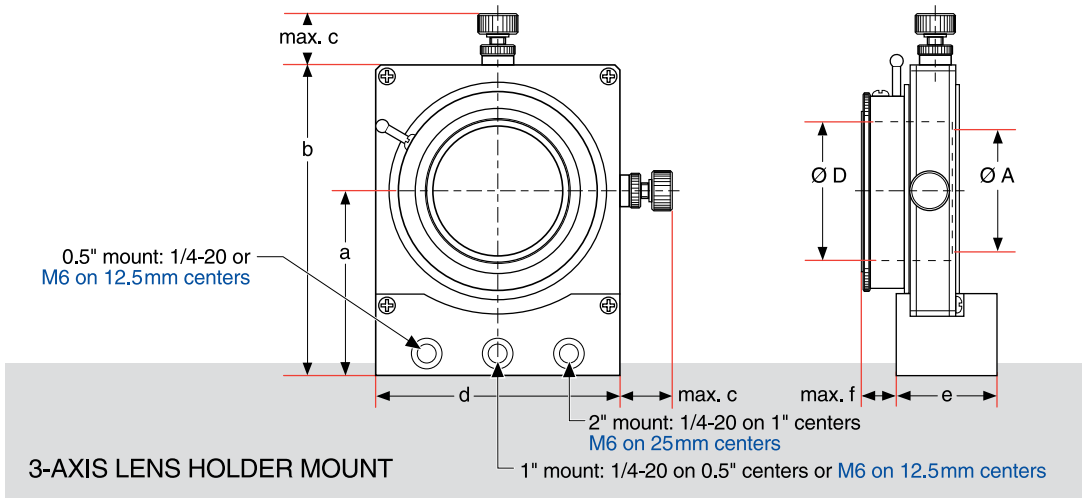
XY translation is accomplished with a high resolution 100-pitch thumb screw. Positioning along the optical axis or Z direction is non-rotational by use of a zoom lever attached to the mount housing. The positioning mechanisms in all three linear axes are lockable to secure your optics position once alignment has been achieved.

We offer three-axis mounts to hold 1/2 inch, 1 inch and 2 inch optics. In addition, the adapters on page 272 may be purchased to mount optics of different diameters. All mounts have inch or metric threaded holes on the bottom to accommodate our post and post holder mounting system. Optional baseplates are offered on page 245 to provide convenient slotted hole mounting configurations.

## Specifications & Tolerances

Dimensions:  $\pm 0.2\text{mm}$   
 Finish: Black anodized  
 Material: Aluminum

Part No.	Dimensions (mm)							
	$\varnothing D$	$\varnothing A$	a	b	c	d	e	f
111-0450/0455	12.7	10	41.3	67.3	19.5	50	19.1	18.1
111-0460/0465	25.4	22	54	90	21.5	68	28.6	15.5
111-0470/0475	50.8	46	66.7	112.7	21.5	88	36	15.5



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## 3-Axis Lens Holder Mount

INCH

METRIC

To Hold Lens Diameter, D (inches)	To Hold Lens Diameter, D (mm)	Zoom Range (mm)	XY Range, (mm)	Price	PART NUMBER	PART NUMBER
0.5	12.7	6	4		111-0450	111-0455
1.0	25.4	6	6		111-0460	111-0465
2.0	50.8	6	6		111-0470	111-0475



### 3 and 5-Axis Optical Mount Baseplates and Inserts

- Mirror Mounts
- Optic Holders**
- Optical Baseplates
- Optical Rails and Carriers
- Bases
- Rod Mounting Systems
- Post, Post Holders, Clamps

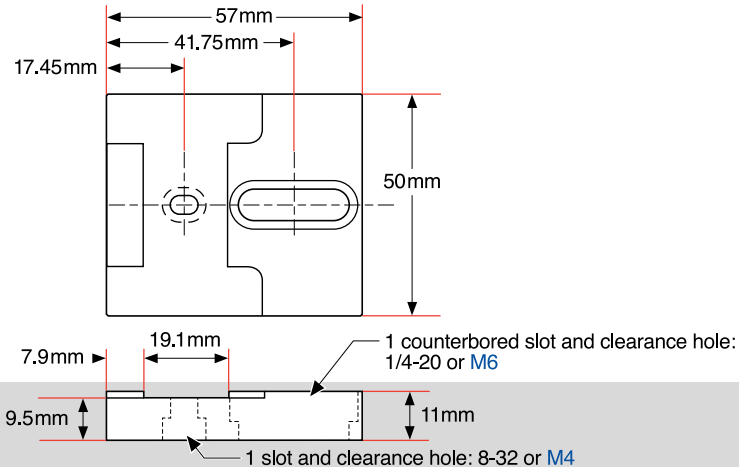


Here we offer three and five-axis optical mount baseplates and inserts. These optional baseplates are offered to provide convenient slotted hole mounting configurations. Various inserts are offered to accommodate 10mm, 30mm, 1.5 inch optics and microscope objectives. Please refer to ordering table on page 246 to select the appropriate optical mount insert for your application.

### Specifications & Tolerances

Dimensions: ±0.2mm  
 Finish: Black anodized  
 Material: Aluminum

Part No. 147-0620

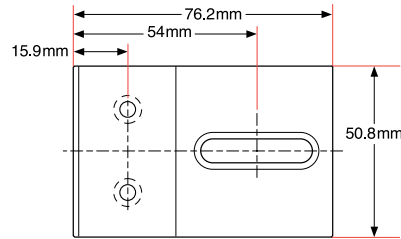


SMALL BASEPLATE FOR LENS HOLDERS

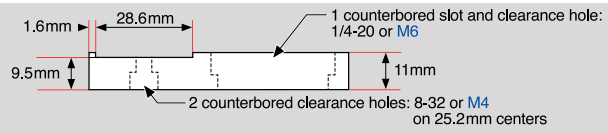
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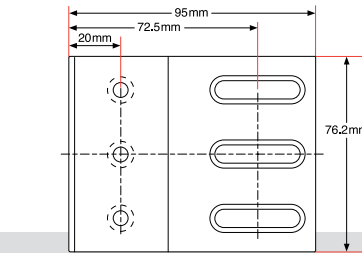
Part No. 147-0630



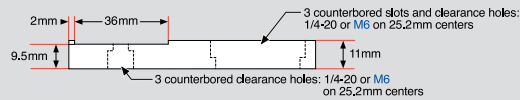
MEDIUM BASEPLATE FOR LENS HOLDERS



Part No. 147-0640



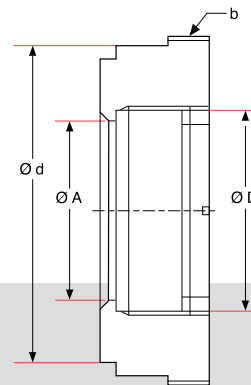
LARGE BASEPLATE FOR LENS HOLDERS



Optional Lens Holder Baseplates

Dimensions, a x b (inches)	(mm)	Price	PART NUMBER
2.24 x 1.97	57.0 x 50.0		147-0620
3.00 x 2.00	76.2 x 50.8		147-0630
3.74 x 3.00	95.0 x 76.2		147-0640

Part No.	Dimensions (mm)			
	D	A	b	d
111-0510	Ø 10	8	Ø 12.7	12.7
111-0520	M20.32	16	M26.25	25
111-0530	Ø 30	27	M51.65	49
111-0540	M29	-	-	50.8
111-0550	M34	-	-	50.8
111-0560	M50.8	-	-	76.2



LENS HOLDER INSERTS

Lens Holder Inserts

To Hold Lens Diameter, D (mm)	Clear Aperture, A (mm)	Outer Diameter, d (mm)	Thread Diameter, b (mm)	Price	PART NUMBER
10.0	8.0	12.7	none		111-0510
microscope objective	16.0	25.0	M26.25		111-0520
30.0	27.0	49.0	M51.65		111-0530
M29 thread	-	50.8	-		111-0540
M34 thread	-	50.8	-		111-0550
M50.8 thread	-	76.2	-		111-0560
38.1	35.0	49.0	M51.65		112-0480

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