

Steel Extended  
Contact Bearing Stages

Stainless Steel Extended  
Contact Bearing Stages

Aluminum Stages

Rotation Stages

Goniometers

Rack & Pinion  
Dovetail Stages

Preset Dovetail Stages

Leadscrew Slides

Tilt Platforms

OEM Slides

Accessories

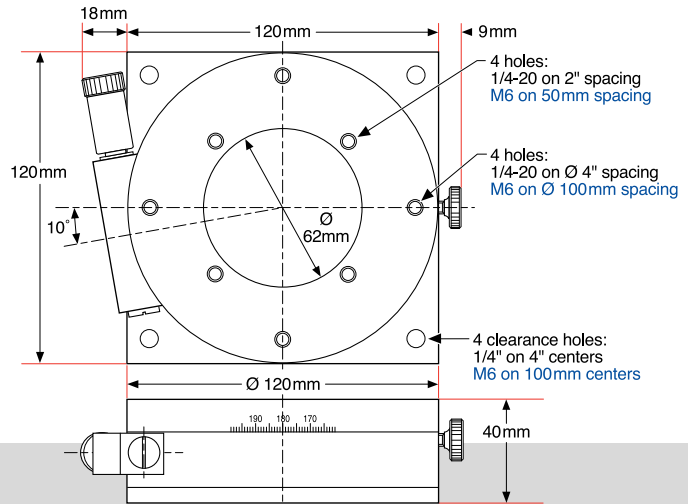
## 360° Continuous Rotation Stages

- Continuous 360 degree rotation
- Fine pitch worm screw driven for high precision
- Lockable
- Four convenient sizes to suit most applications



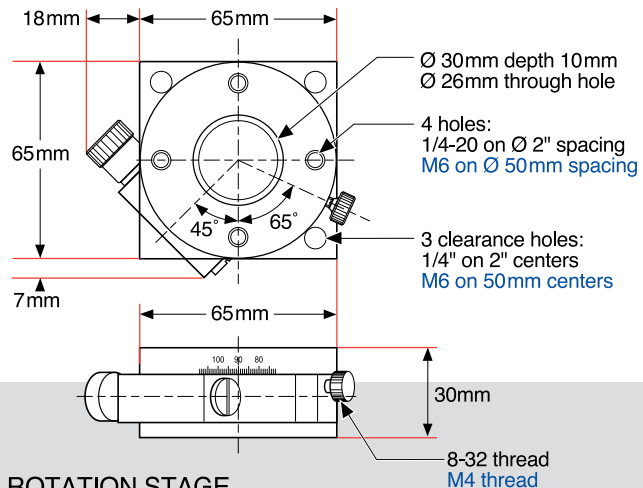
These unique rotation stages provide continuous high precision 360 degree rotation control. The precision rotary action is driven by a fine pitch screw and worm gear to provide fine positioning resolution. And a locking mechanism ensures that the stage is stable and will not move after the desired position is obtained. The continuous rotation stages are available in 120, 65, 40 and 25mm footprints. All stages have central apertures and may be mounted with an optical beam passing through its center. Each stage has hole patterns suitable for use with other OptoSigma linear and rotation stages. 120, 65 and 40mm models are available with inch or metric hole patterns. The 25mm stage is offered only with metric holes. Please refer to the CAD drawings on the following pages for specific stage sizes and hole pattern configurations.

Part No. 124-0350/0355



120mm CONTINUOUS 360° ROTATION STAGE

Part No. 124-0330/0335



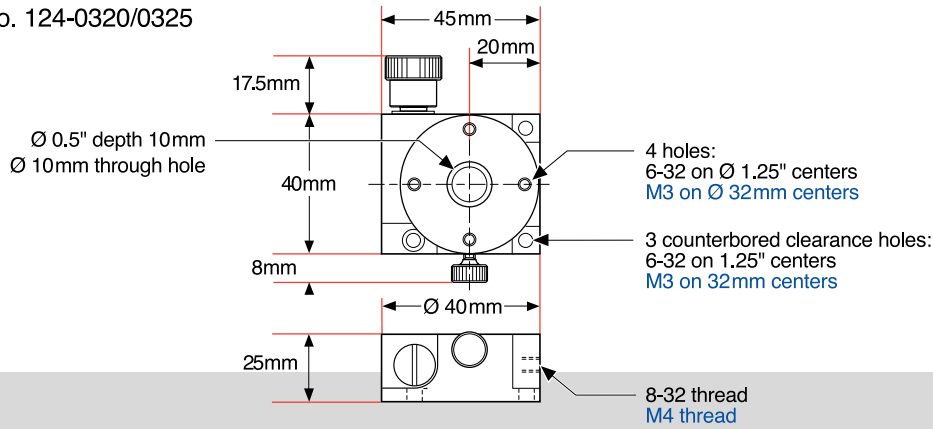
65mm CONTINUOUS 360° ROTATION STAGE

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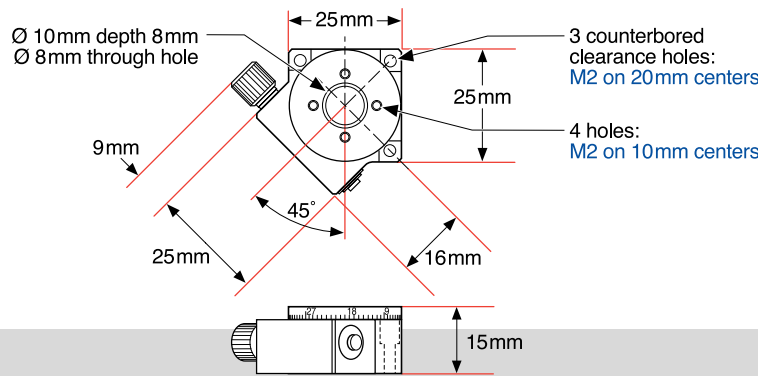
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Part No. 124-0320/0325



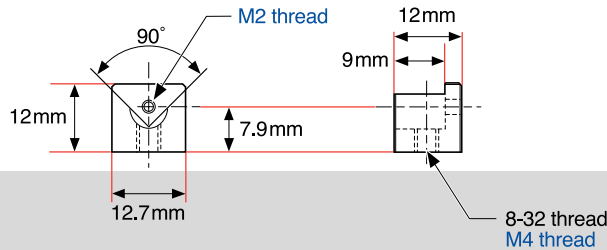
40mm CONTINUOUS 360° ROTATION STAGE

Part No. 124-0315



25mm CONTINUOUS 360° ROTATION STAGE

Part No. 124-0300/0305



25mm CONTINUOUS 360° ROTATION STAGE ADAPTER

## Specifications & Tolerances

Dimensions:  
 ±0.2mm  
 Concentricity: <0.03  
 Parallelism: <0.03  
 Material: Brass  
 Finish: Black Chrome

## 360° Continuous Rotation Stages

INCH METRIC

Outer Diameter, d (mm)	Dimensions, a x b (mm)	Height, c (mm)	To hold, Diameter, D (mm)	Minimum Incremental Motion	Price	PART NUMBER	PART NUMBER
120	120 x 120	40	-	5'	\$ 850.00	124-0350	124-0355
65	65 x 65	30	30.0	10'	\$ 490.00	124-0330	124-0335
40	40 x 40	25	12.7	2(deg)	\$ 390.00	124-0320	124-0325
25	25 x 25	15	10.0	5(deg)	\$ 290.00	-	124-0315
Adapter	12.7 x 2	12	-	-	\$ 15.00	124-0300	124-0305

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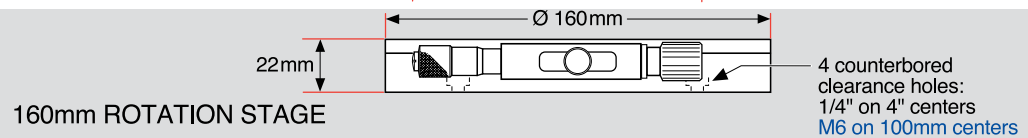
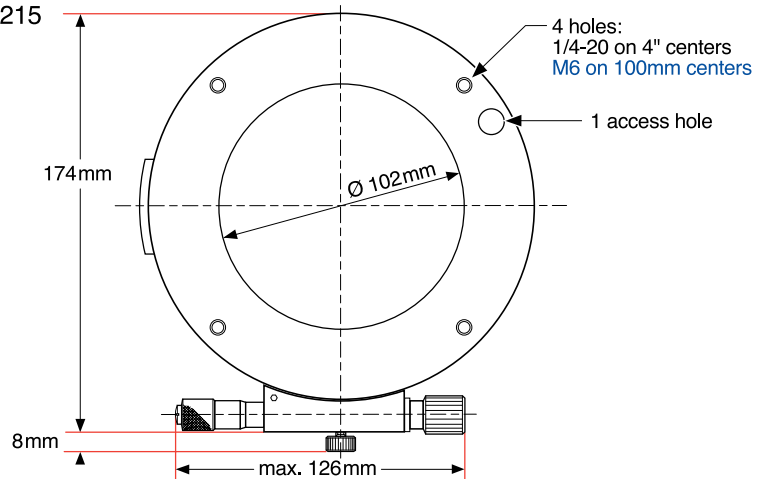
## Rotation Stages

- Continuous 360 degree rotation
- Fine adjustment by micrometer
- Concentricity <50microns
- Compatible with linear translation stages
- Five sizes cover most applications
- Inch and metric mounting



Rotation stages permit the precise angular adjustment of components. These stages use plain brass bearings to provide coarse adjustment over a full 360 degree circle. A scale around the circumference provides an indication of the angle. Once set approximately in place the stage may be locked by means of a clamp screw and then fine adjusted by a micrometer (fine pitch screw is used for the 25mm stage). The sizes of these stages are such that they may be mounted together with translation stages to form compound motion devices. The largest stage we offer has a diameter of 160mm and a 102mm central aperture. The 120mm stage has a 62mm central aperture so it can be mounted with an optical beam passing through its center. The 90mm stage will accept a 65mm linear stage and the 65mm rotation stage can be mounted on top of a 65mm translation stage. The 40mm stage is ideal for OEM applications. The 25mm stage works well with the mini-system described on page 307. The 160, 120 and 90mm stages utilize crossed roller bearings for high load capacity.

Part No. 124-0210/0215



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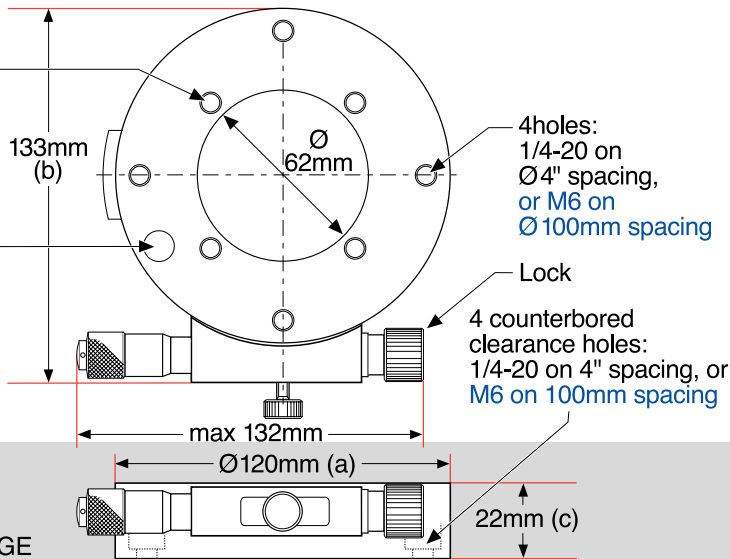
Accessories



Part No. 124-0090/0095

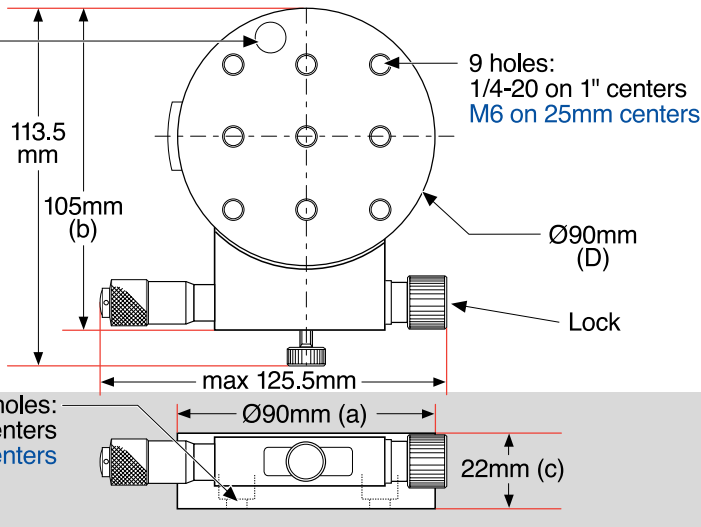
4holes:  
1/4-20 on 2"centers  
M6 on 50mm centers

Ø11 access hole



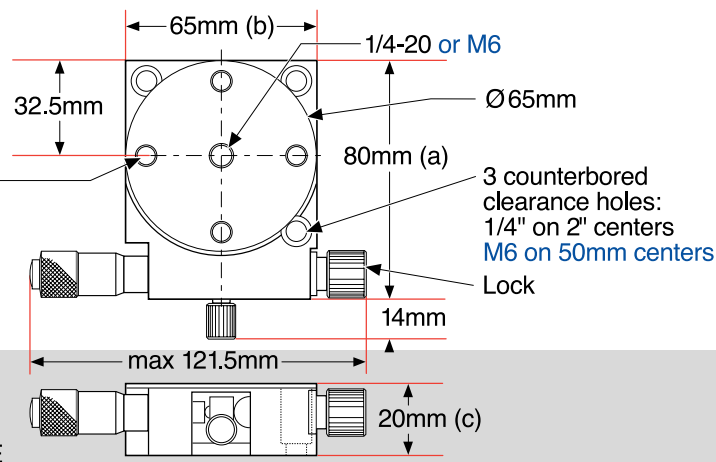
Part No. 124-0070/0075

Ø11 access hole



Part No. 124-0050/0055

4 holes:  
1/4-20 on Ø2" spacing  
M6 on Ø50mm spacing



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**MANUAL POSITIONERS**

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**Rotation Stages**

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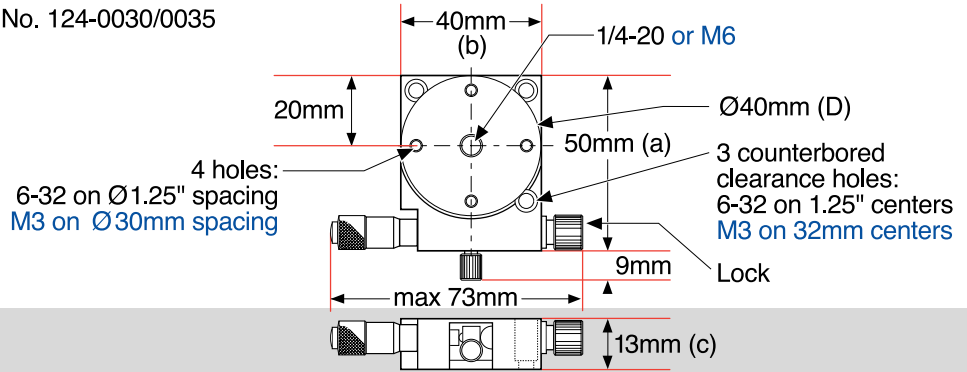
Leadscrew Slides

Tilt Platforms

OEM Slides

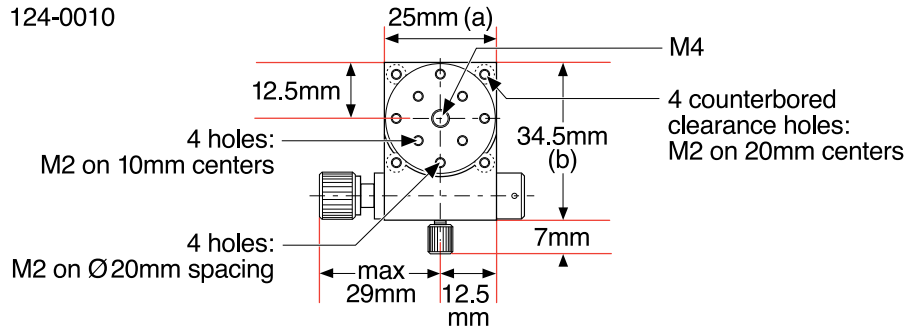
Accessories

Part No. 124-0030/0035



40mm ROTATION STAGE

Part No. 124-0010



25mm ROTATION STAGE

**Specifications & Tolerances**

Dimensions:  $\pm 0.2\text{mm}$   
 Material: Brass  
 Concentricity:  $< 0.05\text{mm}$   
 Finish: Black chrome  
 Parallelism:  $< 0.05\text{mm}$

**Rotation Stages**

**INCH    METRIC**

Outer Diameter, d (mm)	Dimensions, a x b (mm)	Height, c (mm)	Vernier Resolution	Minimum Incremental Motion	Fine Adjustment Range (deg)	Load Capacity (kg)	Price	PART NUMBER	PART NUMBER
160	160 x 174.0	22	5'	20"	$\pm 3$	100	\$ 1095.00	124-0210	124-0215
120	120 x 133.0	22	5'	20"	$\pm 4$	100	\$ 795.00	124-0090	124-0095
90	90 x 103.0	22	5'	30"	$\pm 5$	80	\$ 495.00	124-0070	124-0075
65	65 x 80.0	20	20'	30"	$\pm 5$	7	\$ 240.00	124-0050	124-0055
40	40 x 50.0	13	20'	30"	$\pm 5$	5	\$ 200.00	124-0030	124-0035
25	25 x 34.5	13	20'	1'	$\pm 5$	3	\$ 140.00	-	124-0010