

Steel Extended Contact Bearing Stages

Steel Extended Contact Bearing Stages

Aluminum Stages

Rotation Stages

Goniometers

Rack & Pinion Dovetail Stages

Preset Dovetail Stages

Leadscrew Slides

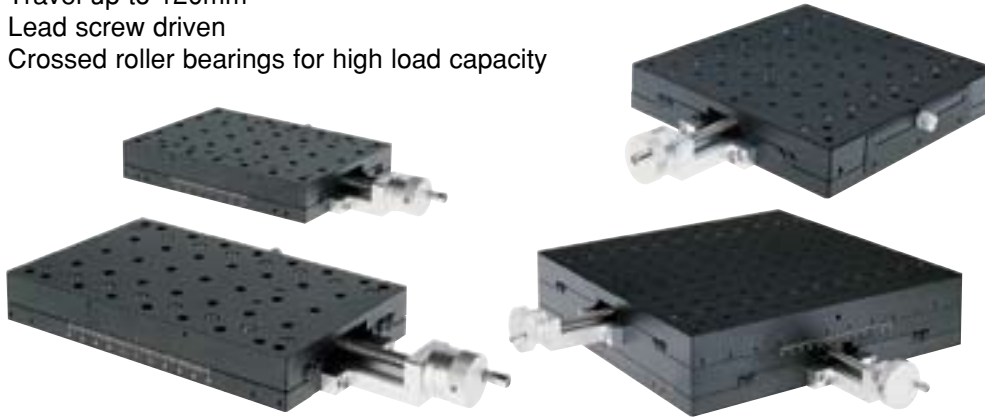
Tilt Platforms

OEM Slides

Accessories

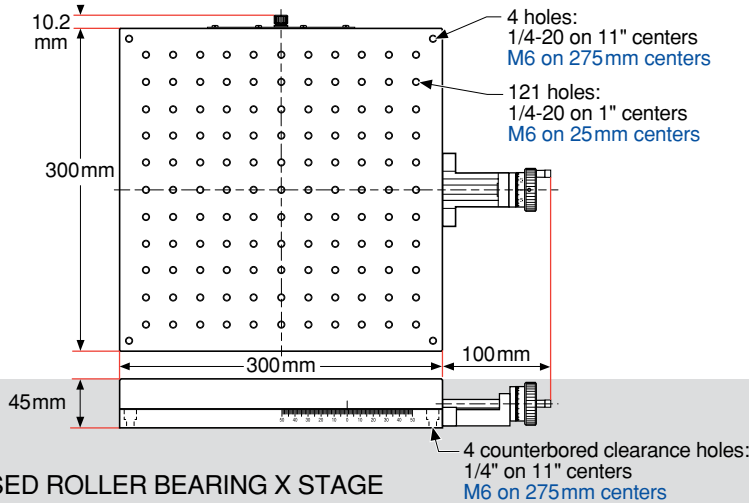
Long Travel Crossed Roller Bearing Stages

- Travel up to 120mm
- Lead screw driven
- Crossed roller bearings for high load capacity



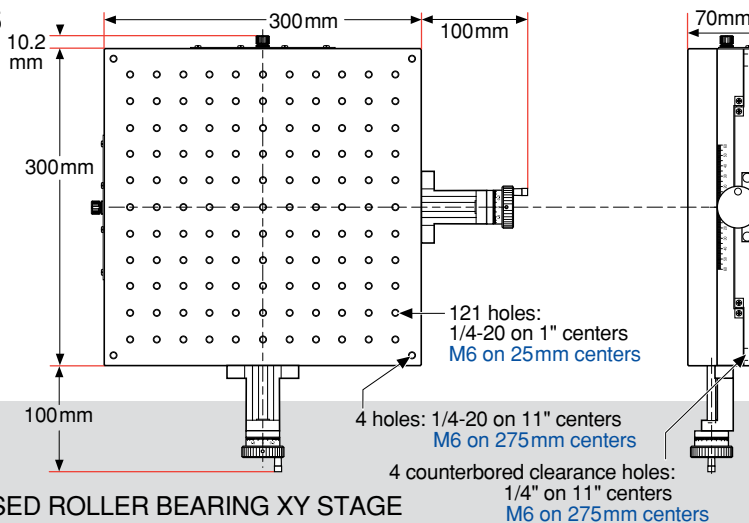
For applications that require long manual travel, these lead screw driven stages are the solution. They are constructed from aluminum using crossed roller bearings to provide high load capacity. Each stage is driven through use of a hand crank attached directly to the lead screw. These long travel stages are available as 200mm and 300mm footprints in X and XY configurations. The 200mm version has 100mm of travel and the 300mm footprint has 120mm of travel. All stages have convenient 1/4-20 tapped holes on inch centers or M6 tapped holes on 25mm centers for metric versions.

Part No. 123-0540/0545



300mm LARGE CROSSED ROLLER BEARING X STAGE

Part No. 123-0550/0555



300mm LARGE CROSSED ROLLER BEARING XY STAGE

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MANUAL POSITIONERS

Steel Extended
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Stainless Steel Extended
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Aluminum Stages

Rotation Stages

Goniometers

Rack & Pinion
Dovetail Stages

Preset Dovetail Stages

Leadscrew Slides

Tilt Platforms

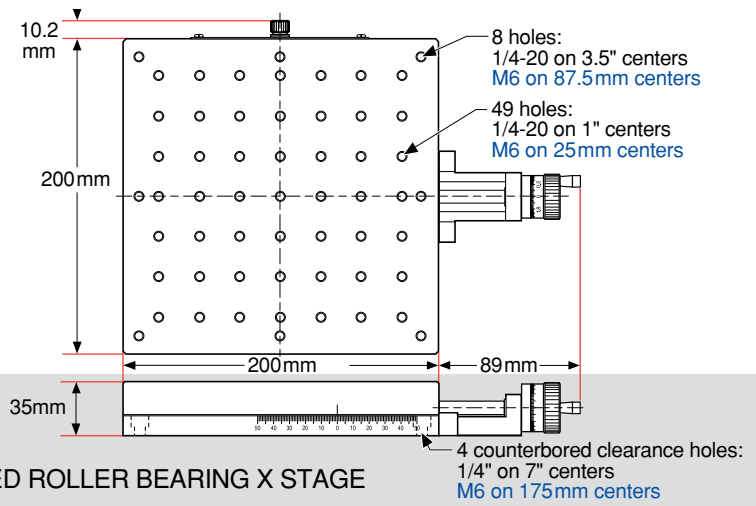
OEM Slides

Accessories

Specifications & Tolerances

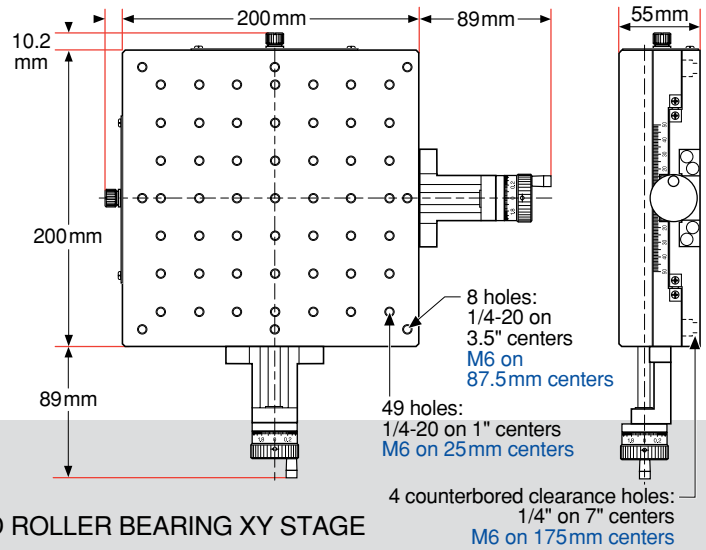
- Dimensions: $\pm 0.2\text{mm}$
- Straightness: 0.007
- Pitch: $< 25\text{arcsec}$
- Yaw: $< 15\text{arcsec}$
- Sensitivity: $20\mu\text{m}$
- Material: Aluminum
- Position resolution: $10\mu\text{m}$
- Finish: Black anodized

Part No. 123-0520/0525



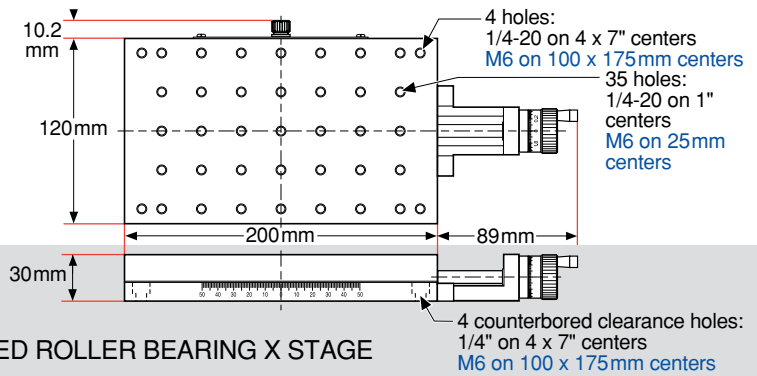
200mm LARGE CROSSED ROLLER BEARING X STAGE

Part No. 123-0530/0535



200mm LARGE CROSSED ROLLER BEARING XY STAGE

Part No. 123-0510/0515



120mm LARGE CROSSED ROLLER BEARING X STAGE

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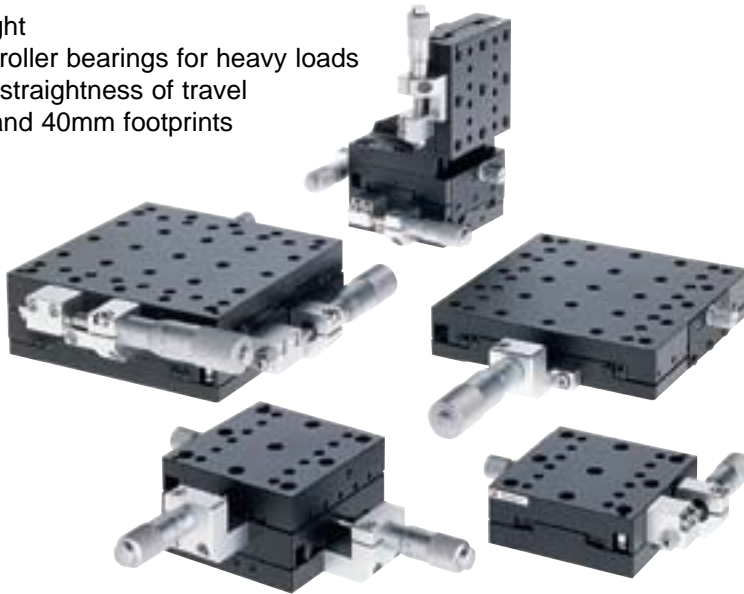
**Long Travel Aluminum
Crossed Roller Bearing Stages**

Dimensions, a x b, (mm)	Height (mm)	Axes of Travel	Travel (mm)	Load Capacity (kg)	Price	INCH	METRIC
						PART NUMBER	PART NUMBER
300 x 300	45	X	120	40	\$ 1,995.00	123-0540	123-0545
300 x 300	70	XY	120	40	\$ 3,980.00	123-0550	123-0555
200 x 200	35	X	100	30	\$ 1,250.00	123-0520	123-0525
200 x 200	55	XY	100	30	\$ 2,500.00	123-0530	123-0535
120 x 200	30	X	100	20	\$ 1,050.00	123-0510	123-0515



Aluminum Crossed-roller Bearing Stages

- Lightweight
- Crossed-roller bearings for heavy loads
- Superior straightness of travel
- 120, 65 and 40mm footprints
- Lockable

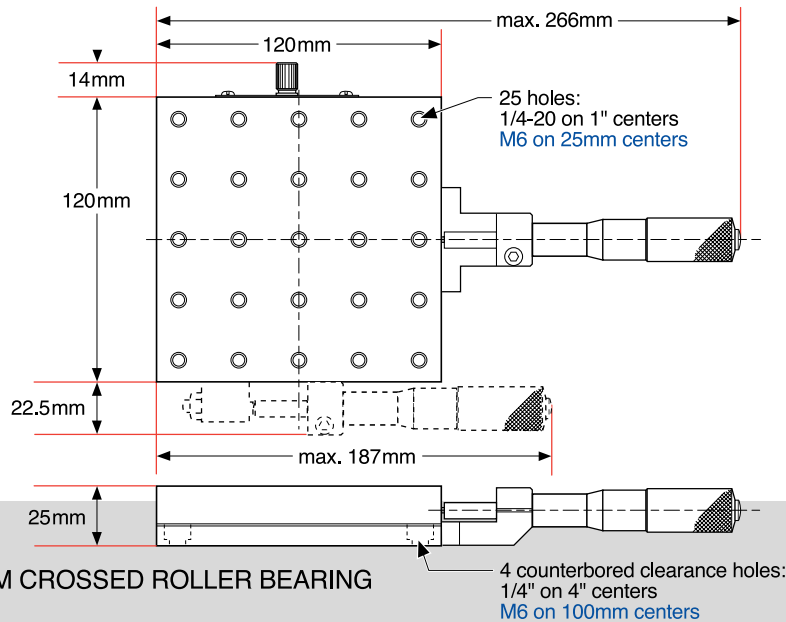


In many manufacturing applications weight is at a premium. Aluminum stages are used when weight needs to be minimized. In order to maintain the required accuracy precision crossed-roller bearings are mounted into the machined aluminum.

Three sizes cover most applications. The 120mm stages are best for heavy load applications. While the 65mm size is ideal for most general equipment applications. A 40mm range provides more compact mounting for use in instruments where space is at a premium. All sizes have inch or metric hole patterns which enable them to be built as compactly as possible. Travel is listed in the table on page 381 for each stage but can be extended slightly beyond this range if necessary.

120mm Aluminum Crossed Roller Stages

Part No. 123-0410/0415/0420/0425



120mm ALUMINIUM CROSSED ROLLER BEARING X STAGE

Steel Extended Contact Bearing Stages

Steel Extended Contact Bearing Stages

Aluminum Stages

Rotation Stages

Goniometers

Rack & Pinion Dovetail Stages

Preset Dovetail Stages

Leadscrew Slides

Tilt Platforms

OEM Slides

Accessories

Crossed-roller bearings provide a high degree of linearity combined with a high load bearing capacity.

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Rack & Pinion
Dovetail Stages

Preset Dovetail Stages

Leadscrew Slides

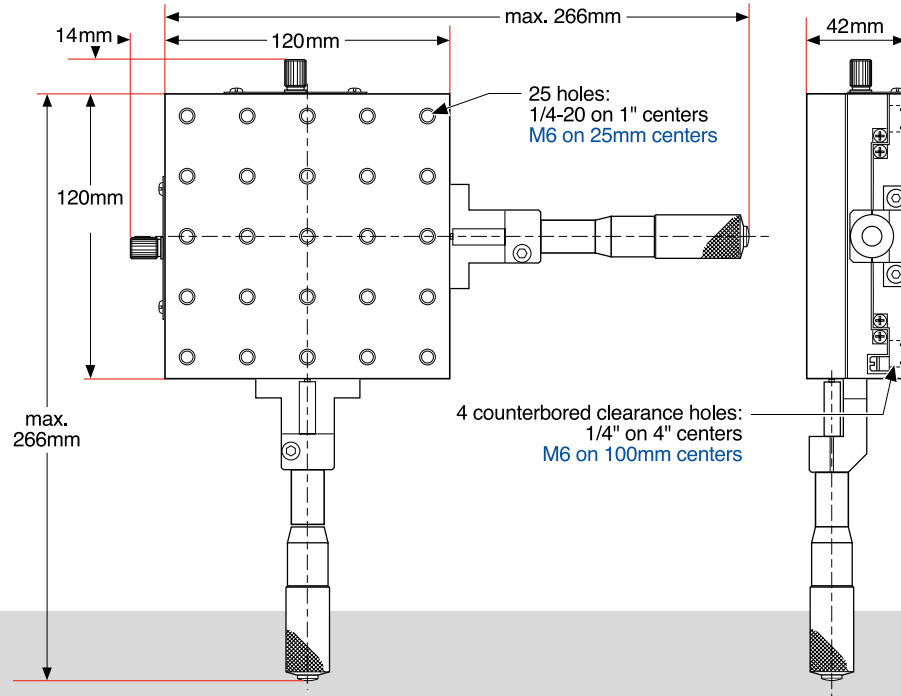
Tilt Platforms

OEM Slides

Accessories

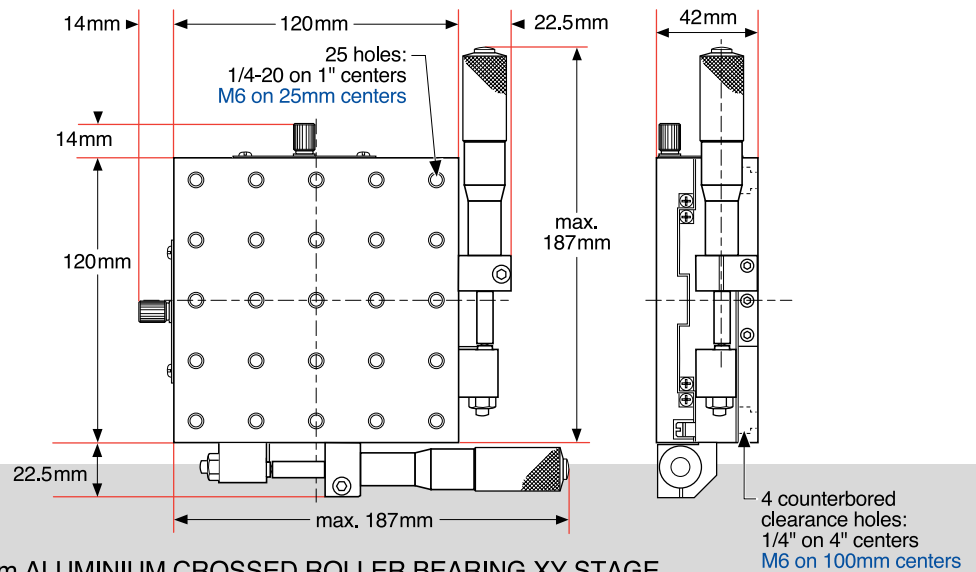
65mm Aluminum Crossed Roller Stages

Part No. 123-0430/0435



120mm ALUMINIUM CROSSED ROLLER BEARING XY STAGE

Part No. 123-0440/0445



120mm ALUMINIUM CROSSED ROLLER BEARING XY STAGE

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65mm Aluminum Crossed Roller Stages

Steel Extended Contact Bearing Stages

Steel Extended Contact Bearing Stages

Aluminum Stages

Rotation Stages

Goniometers

Rack & Pinion Dovetail Stages

Preset Dovetail Stages

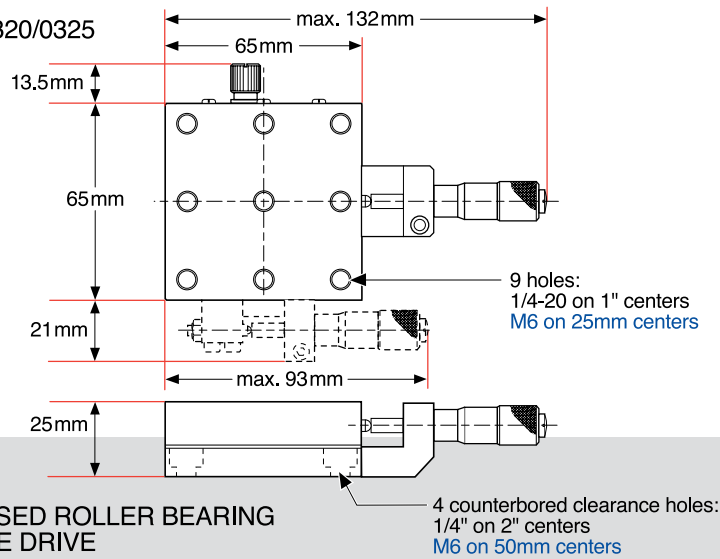
Leadscrew Slides

Tilt Platforms

OEM Slides

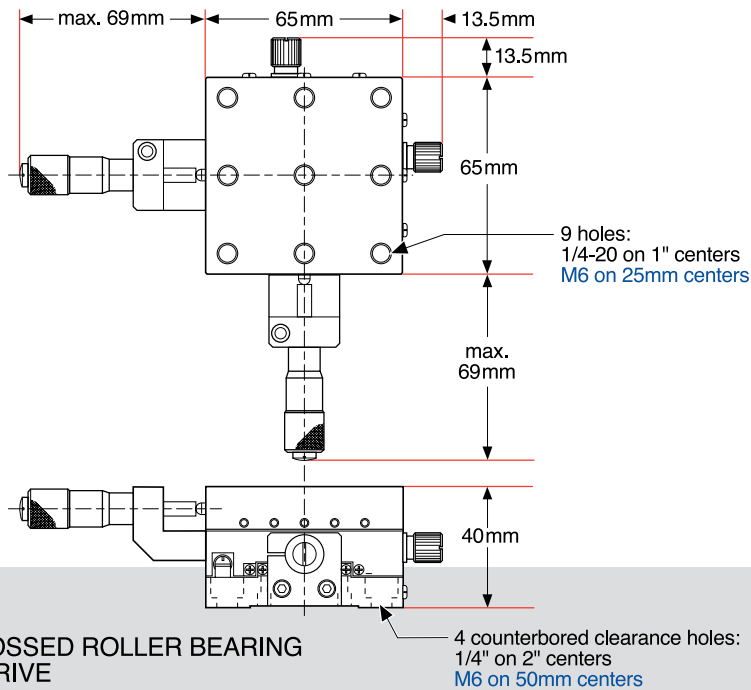
Accessories

Part No. 123-0310/0315/0320/0325



65mm ALUMINUM CROSSED ROLLER BEARING STAGE X CENTER & SIDE DRIVE

Part No. 123-0330/0335



65mm ALUMINUM CROSSED ROLLER BEARING STAGE XY CENTER DRIVE

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Stainless Steel Extended
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Goniometers

Rack & Pinion
Dovetail Stages

Preset Dovetail Stages

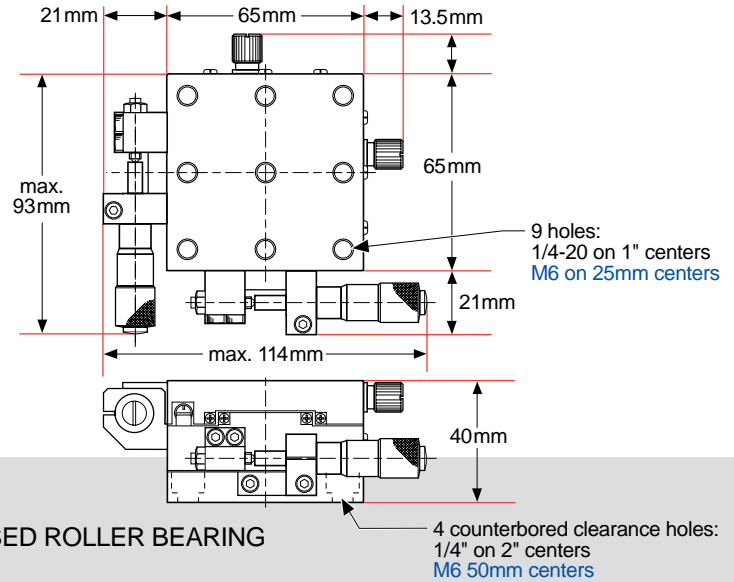
Leadscrew Slides

Tilt Platforms

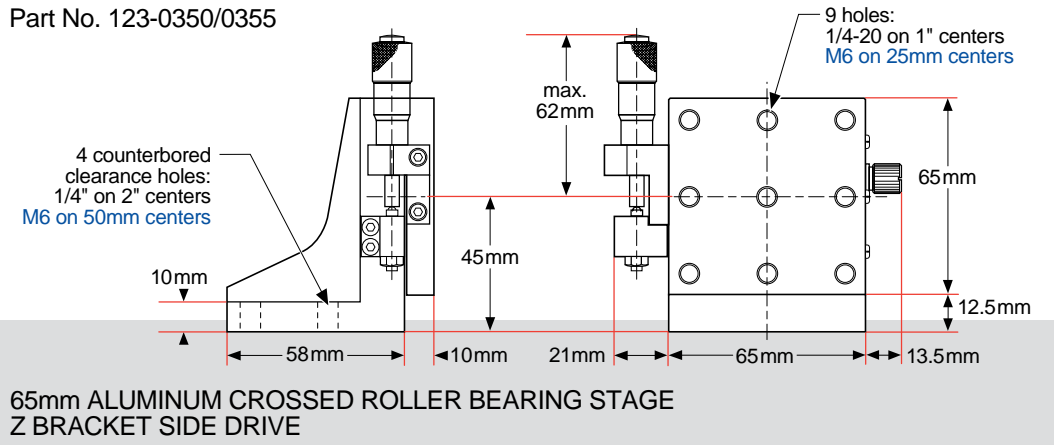
OEM Slides

Accessories

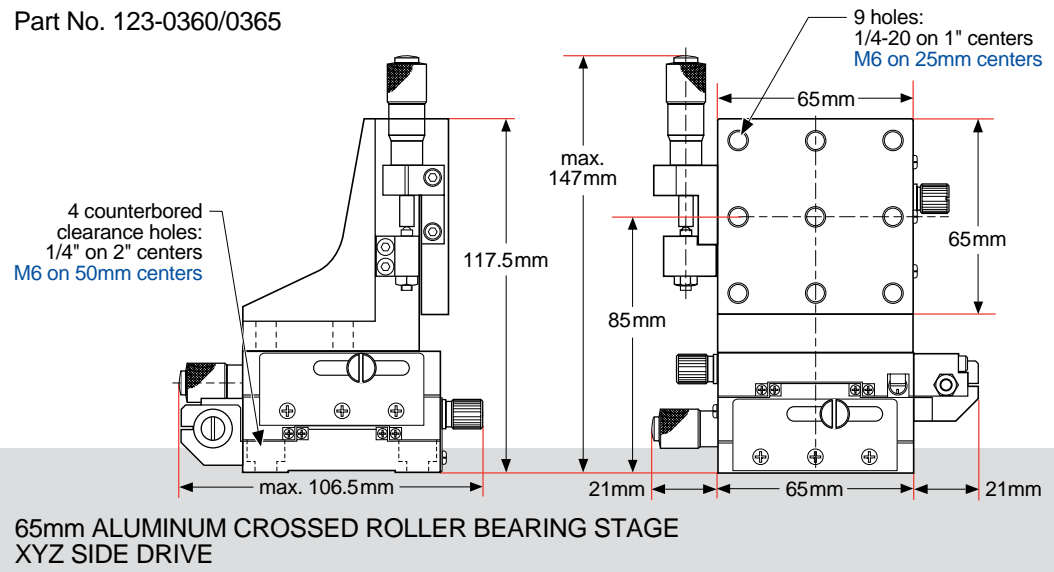
Part No. 123-0340/0345



Part No. 123-0350/0355



Part No. 123-0360/0365



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Contact Bearing Stages

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Rack & Pinion
Dovetail Stages

Preset Dovetail Stages

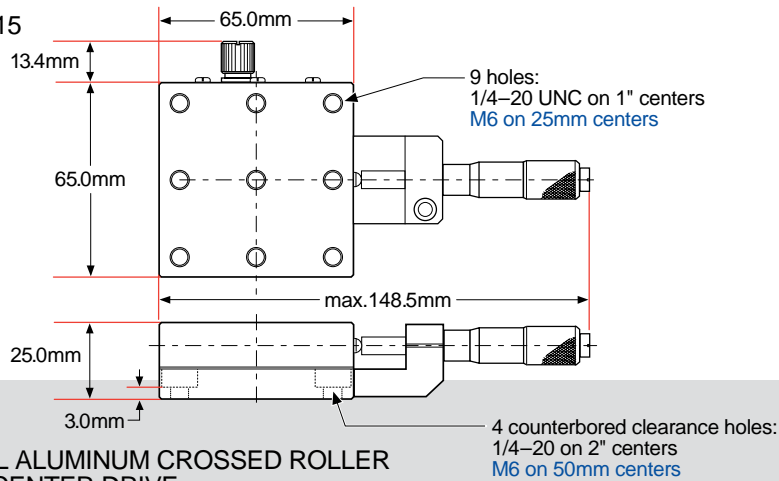
Leadscrew Slides

Tilt Platforms

OEM Slides

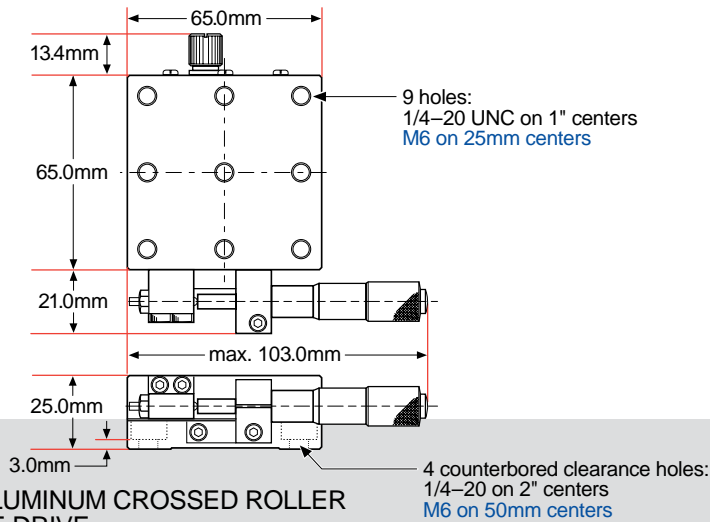
Accessories

Part No. 123-0610/0615



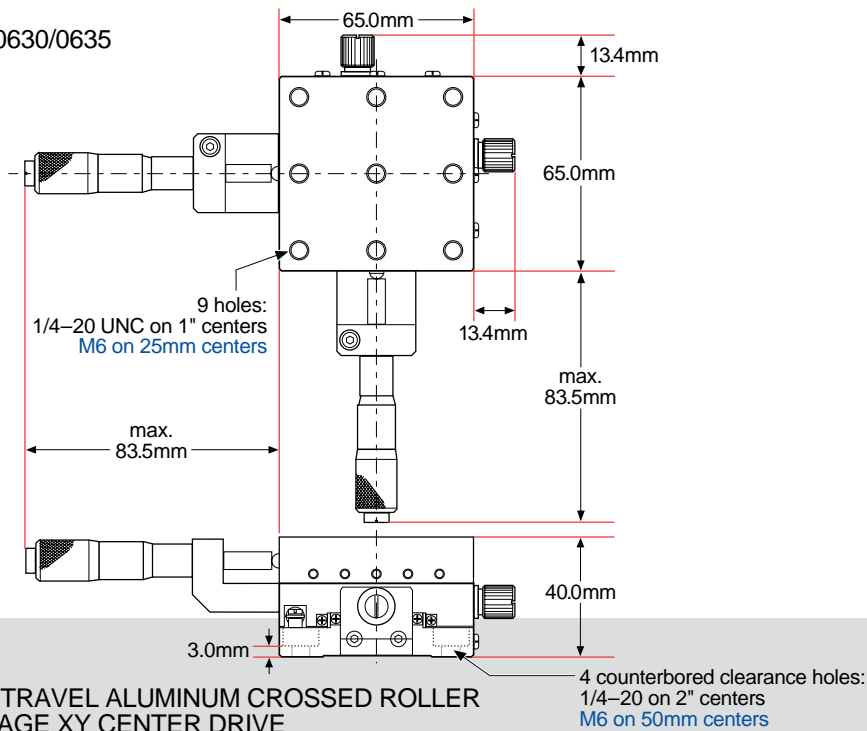
65mm 25mm TRAVEL ALUMINUM CROSSED ROLLER BEARING STAGE X CENTER DRIVE

Part No. 123-0620/0625



65mm 25mm TRAVEL ALUMINUM CROSSED ROLLER BEARING STAGE X SIDE DRIVE

Part No. 123-0630/0635



65mm 25mm TRAVEL ALUMINUM CROSSED ROLLER BEARING STAGE XY CENTER DRIVE

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Stainless Steel Extended
Contact Bearing Stages

Aluminum Stages

Rotation Stages

Goniometers

Rack & Pinion
Dovetail Stages

Preset Dovetail Stages

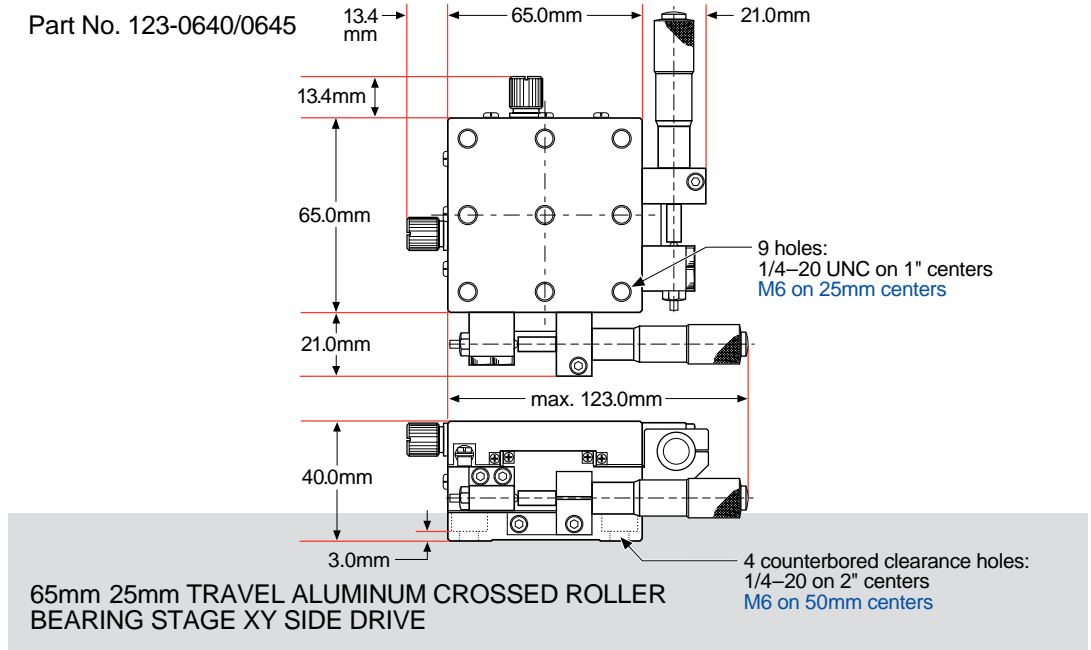
Leadscrew Slides

Tilt Platforms

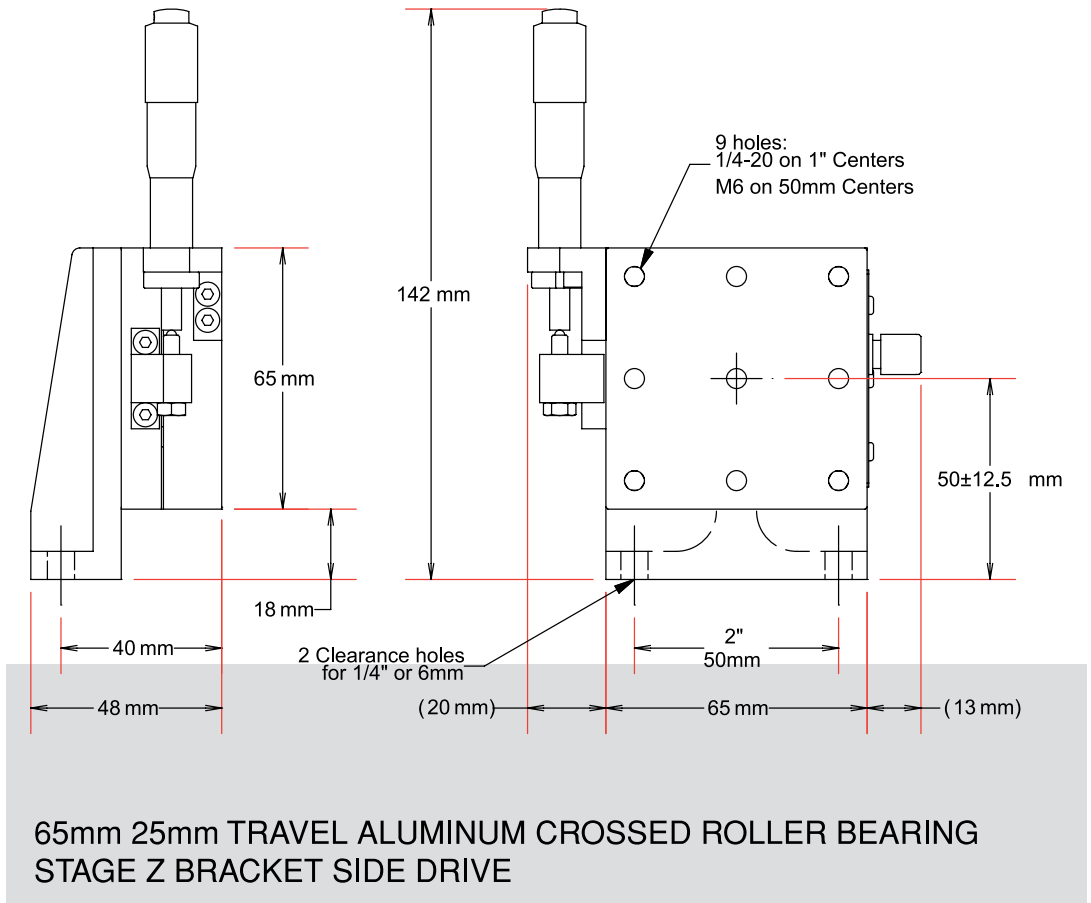
OEM Slides

Accessories

Part No. 123-0640/0645



Part No. 122-0660/0665



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Part No. 123-0680/0685

Steel Extended
Contact Bearing Stages

Steel Extended
Contact Bearing Stages

Aluminum Stages

Rotation Stages

Goniometers

Rack & Pinion
Dovetail Stages

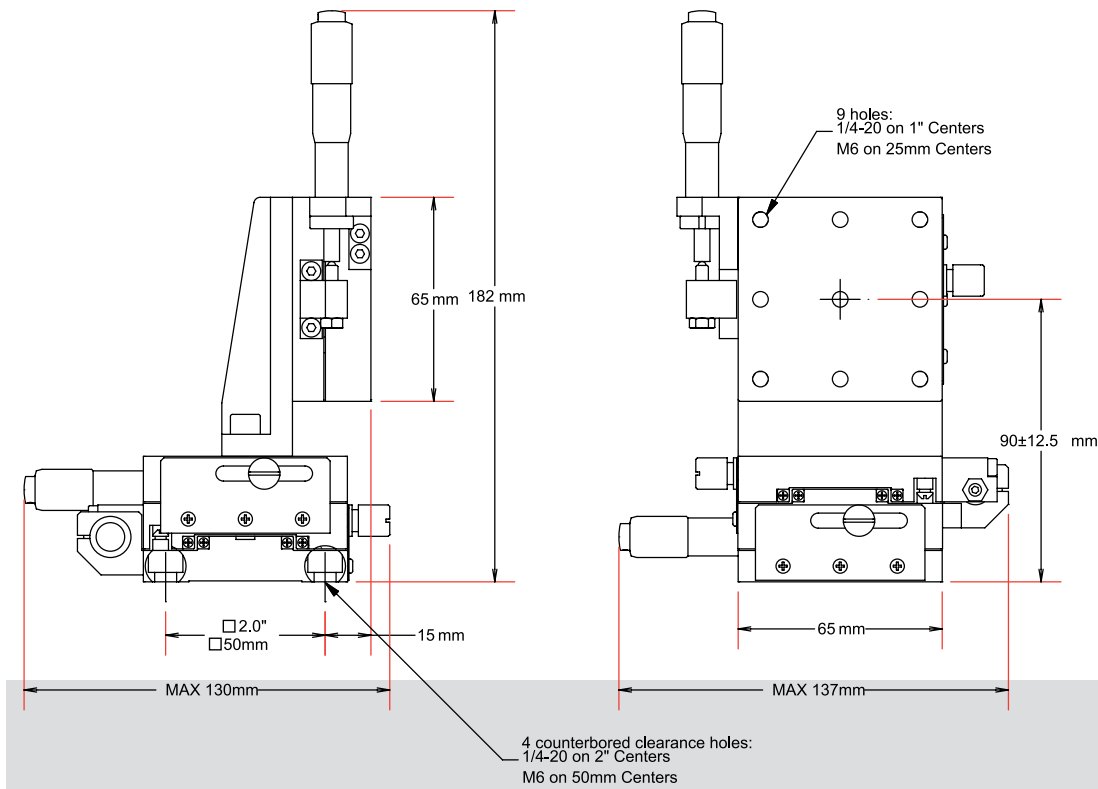
Preset Dovetail Stages

Leadscrew Slides

Tilt Platforms

OEM Slides

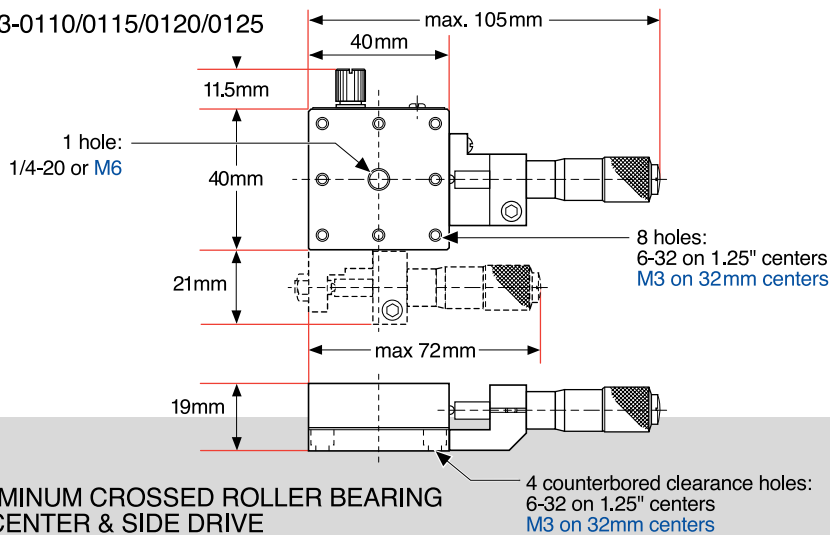
Accessories



ALUMINUM CROSSED ROLLER BEARING STAGE XYZ SIDE DRIVE

40mm Aluminum Crossed Roller Stages

Part No. 123-0110/0115/0120/0125



40mm ALUMINUM CROSSED ROLLER BEARING X STAGE CENTER & SIDE DRIVE

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Contact Bearing Stages

Aluminum Stages

Rotation Stages

Goniometers

Rack & Pinion
Dovetail Stages

Preset Dovetail Stages

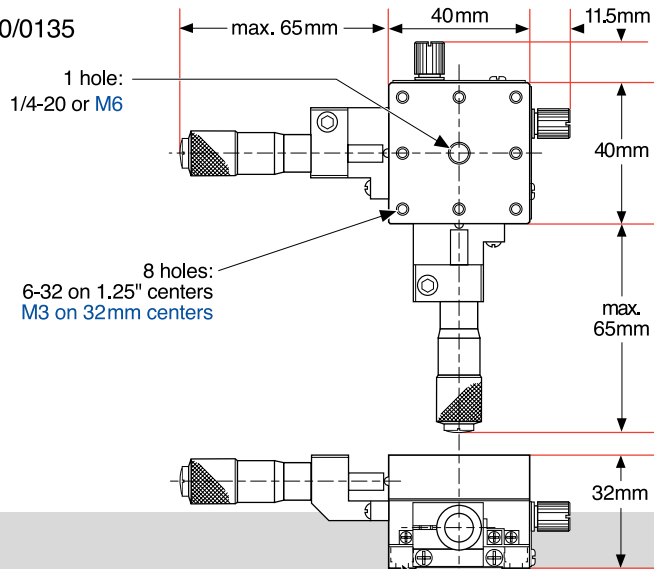
Leadscrew Slides

Tilt Platforms

OEM Slides

Accessories

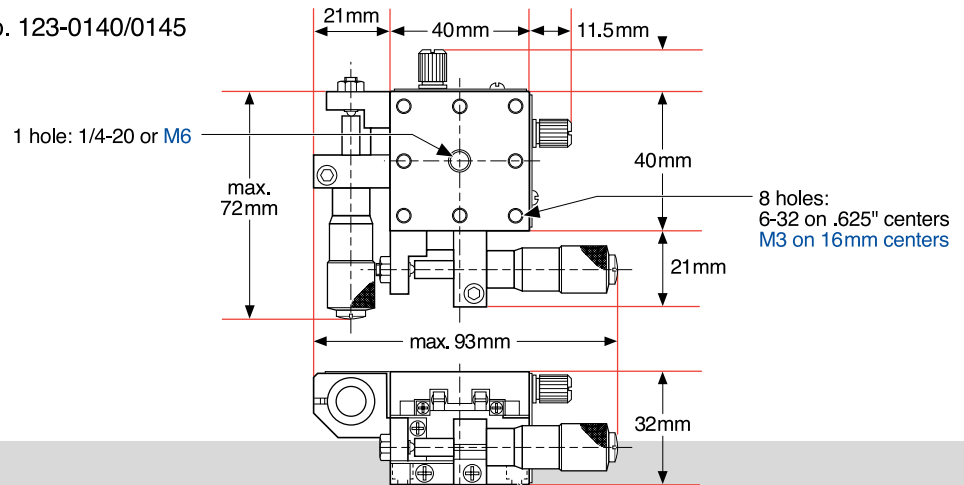
Part No. 123-0130/0135



40mm ALUMINUM CROSSED ROLLER BEARING
XY STAGE CENTER DRIVE

4 counterbored clearance holes:
6-32 on 1.25" centers or M3 on 32mm centers

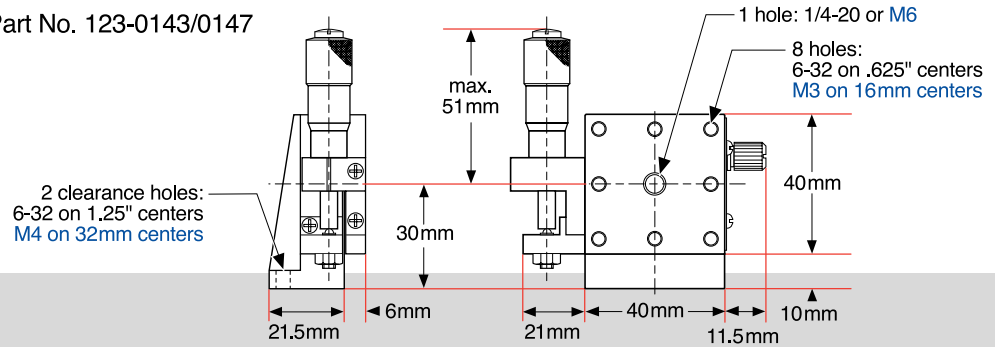
Part No. 123-0140/0145



40mm ALUMINUM CROSSED ROLLER BEARING
XY STAGE SIDE DRIVE

4 counterbored clearance holes:
6-32 on 1.25" centers
M4 32mm centers

Part No. 123-0143/0147



40mm ALUMINUM CROSSED ROLLER BEARING Z STAGE

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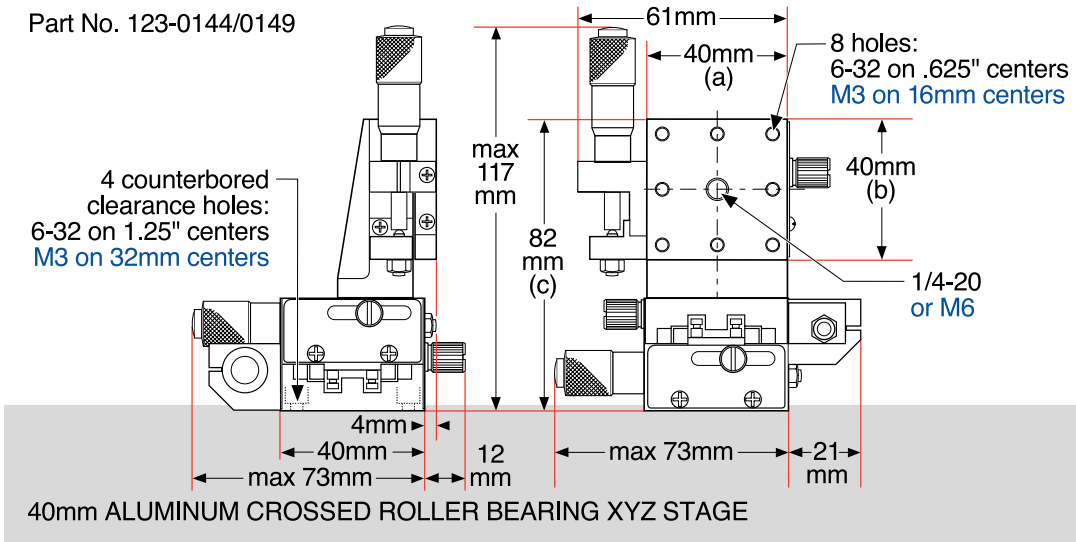
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- Steel Extended Contact Bearing Stages
- Steel Extended Contact Bearing Stages
- Aluminum Stages
- Rotation Stages
- Goniometers
- Rack & Pinion Dovetail Stages
- Preset Dovetail Stages
- Leadscrew Slides
- Tilt Platforms
- OEM Slides
- Accessories

Part No. 123-0144/0149



Specifications & Tolerances

Dimensions: $\pm 0.2\text{mm}$ Straightness: $3\mu\text{m}$
 Pitch: $<25\text{arcsec}$ Yaw: $<15\text{arcsec}$
 Micrometer sensitivity: $10\mu\text{m}$ Material: Aluminum
 Position Resolution: $3\mu\text{m}$ Finish: Black anodized

Aluminum Crossed-Roller Bearing Stages

Dimensions a x b Height (mm)	Height (mm)	Axes of Travel	Travel (mm)	Micrometer Position	Load Capacity (kg)	Price	INCH	METRIC
							PART NUMBER	PART NUMBER
120 x 120	25.0	X	± 20	Center	18	\$ 420.00	123-0410	123-0415
120 x 120	25.0	X	± 20	Side	18	\$ 420.00	123-0420	123-0425
120 x 120	42.0	XY	± 20	Center	18	\$ 790.00	123-0430	123-0435
120 x 120	42.0	XY	± 20	Side	18	\$ 790.00	123-0440	123-0445
65 x 65	25.0	X	± 6.5	Center	6	\$ 290.00	123-0310	123-0315
65 x 65	25.0	X	± 6.5	Side	6	\$ 290.00	123-0320	123-0325
65 x 65	40.0	XY	± 6.5	Center	6	\$ 560.00	123-0330	123-0335
65 x 65	40.0	XY	± 6.5	Side	6	\$ 560.00	123-0340	123-0345
65 x 65	77.5	Z	± 6.5	Bracket Side	2	\$ 335.00	123-0350	123-0355
65 x 65	117.5	XYZ	± 6.5	Side	2	\$ 895.00	123-0360	123-0365
65 x 65	25.0	X	± 12.5	Center	6	\$ 320.00	123-0610	123-0615
65 x 65	25.0	X	± 12.5	Side	6	\$ 320.00	123-0620	123-0625
65 x 65	40.0	XY	± 12.5	Center	6	\$ 590.00	123-0630	123-0635
65 x 65	40.0	XY	± 12.5	Side	6	\$ 590.00	123-0640	123-0645
65 x 65	77.5	Z	± 12.5	Bracket Side	2	\$ 365.00	123-0660	123-0665
65 x 65	122.5	XYZ	± 12.5	Side	2	\$ 980.00	123-0680	123-0685
40 x 40	19.0	X	± 6.5	Center	2	\$ 240.00	123-0110	123-0115
40 x 40	19.0	X	± 6.5	Side	2	\$ 240.00	123-0120	123-0125
40 x 40	32.0	XY	± 6.5	Center	2	\$ 480.00	123-0130	123-0135
40 x 40	32.0	XY	± 6.5	Side	2	\$ 480.00	123-0140	123-0145
40 x 40	50.0	Z	± 6.5	Bracket Side	1	\$ 305.00	123-0143	123-0147
40 x 40	108.0	XYZ	± 6.5	Side	1	\$ 785.00	123-0144	123-0149

Side micrometers are normally mounted on the left hand side of the stage. For **right hand** mounted micrometers **append -R**.