XY Axis Preset Dovetail Translation Stages - Footprints

TASB-2

RoHS

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Ohters

15 × 15 mm 25 × 25 mm

40 × 40 mm 60 × 60 mm

65 × 65 mm

80 × 80 mm 100 x 100 mm

120 × 120 mm **Others**

Stage Size 15 × 15 mm / 25 × 25 mm / 40 × 40 mm / 60 × 60 mm / 65 × 65 mm

Preset dovetail translation stages with leadscrew actuators and locking mechanism. Ideal stages for system integration.

- Preset dovetail translation stages with leadscrew actuators and locking mechanism. Ideal stages for system integration.
- Ideal for system integration where fine alignment is made, the stage is locked, and the system is sealed or closed.
- Multiple square footprints available.
- Minimal protrusions, including the adjustment knob, to fit within tight locations.
- Lockable with the use of a small locking set screw and wrench.

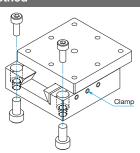


Guide

▶ A hex wrench, knurled knob, and locking wrench are included.



Mounting Method



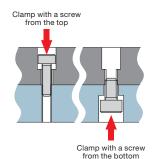
About Mounting Holes

The bottom mounting holes of preset stages are tapped holes. These stages allow mounting from the top or the bottom, convenient for securing on optical breadboards or other instruments as well as assembling in systems. Use the screws of the sizes listed in the table on the right for mounting.

Part Number	Secure from the top	Secure from the bottom	
TASB-152	M2	M2.6	
TASB-252	M2	M3	
TASB-402	M3	M4	
TASB-402UU	6-32UNC	_	
TASB-602	M4	M5	
TASB-652-M6	M6	M8	
TASB-652UU	1/4-20UNC	5/16-18UNC	

^{*} When mounting from the top surface, slide the top surface to insert screws in mounting holes.

Detailed Illustration



Top mounting

Tapped holes are used as counterbores because screws are smaller than tapped holes and will go in without any interference.

Bottom mounting

Clamp with screws that match the specification of tapped holes.

Specifications Specification Specific									
Part Number	METRIC	TASB-152	TASB-252	TASB-402	TASB-602	TASB-652-M6			
	INCH	-	_	TASB-402UU	_	TASB-652UU			
Stage Size [mm]		15×15	25×25	40×40	60×60	65×65			
Axes of Travel		XY axis							
Travel [mm]		±2 ±3 ±7 ±10				±12.5			
Screw Pitch [mm]		0.4	0.5	0.5	0.5	0.5			
Guide Method		Dovetail method							
Primary Material		Brass							
Finish		Black matte							
Load Capacity [N]		9.8 (1.0kgf)	49 (5.0kgf)	98.1 (10.0kgf)	147 (15.0kgf)	147 (15.0kgf)			
Travel Accuracy	Straightness [µm]	10	10	10	10	10			
Max. Moment Capacity	Pitch [N·m]	0.5	2.0	3.75	5.1	5.1			
	Roll [N·m]	0.5	2.0	3.75	5.1	5.1			
	Yaw [N·m]	0.2	1.0	3.0	4.0	4.0			
Moment Stiffness	Pitch ["/N·cm]	15	3.57	1.12	0.7	0.7			
	Roll ["/N·cm]	15	3.57	1.12	0.7	0.7			
Parallelism [µm]		100	100	100	100	100			
Weight [kg]		0.03	0.11	0.3	0.83	1.12			

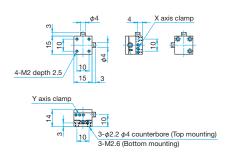




Outline Drawing

TASB-152

- Pan head screw M2×5...3 screws, One 2.5mm hex wrench with knob, One 0.89mm hex wrench
- hex wrench with knob size 2.5mm, hex wrench size for clamp 0.89mm



TASB-402/402UU

TASB-402

TASB-402UU

TASB-652-M6/652UU

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hex wrench with knob size 3mm, hex wrench size for clamp 1.5mm

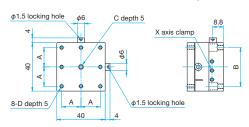
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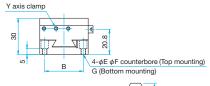
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- Pan head screw M3×8...4 screws, One 3mm hex wrench with knob, One 1.5mm hex wrench Hexagonal socket head cap screw 6-32UNC×3/8...4 screws, One 3mm hex wrench with knob, One 1.5mm hex wrench (UU)
- hex wrench with knob size 3mm, hex wrench size for clamp 1.5mm





Adjustment wrench size B=3										
Part Number	A (mm)	B (mm)	С	D	E (mm)	F (mm)	G			
TASB-402	16	32	M4	M3	3.3	6	4-M4			

15.875 31.75 8-32UNC 6-32UNC

Hexagonal socket head cap screw M6x12...4 screws, One 3mm hex wrench with knob, One 1.5mm hex wrench (M6)
Hexagonal socket head cap screw 1/4-20UNCx1/2...4 screws, One 3mm hex wrench with knob, One 1.5mm hex wrench (UU)

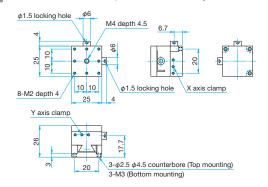
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X axis clamp

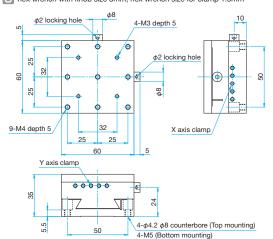
TASB-252

- Pan head screw M2×6...3 screws, One 3mm hex wrench with knob, One 0.89mm hex wrench
- hex wrench with knob size 3mm, hex wrench size for clamp 0.89mm



TASB-602

- Hexagonal socket head cap screw M4×10...4 screws, One 3mm hex wrench with knob, One 1.5mm hex wrench
- hex wrench with knob size 3mm, hex wrench size for clamp 1.5mm



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