

X Axis Preset Dovetail Translation Stages - Footprints

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

TASB-1

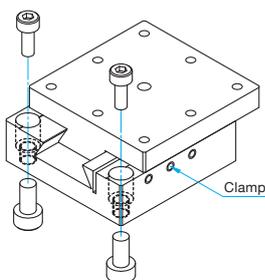
RoHS

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.



Mounting Method

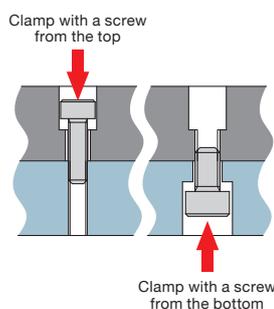


Guide

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



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.

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-151	M2	M2.6
TASB-251	M2	M3
TASB-401	M3	M4
TASB-401UU	6-32UNC	—
TASB-601	M4	M5
TASB-651-M6	M6	M8
TASB-651UU	1/4-20UNC	5/16-18UNC

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

Specifications

Part Number	METRIC	TASB-151	TASB-251	TASB-401	TASB-601	TASB-651-M6
	INCH	—	—	TASB-401UU	—	TASB-651UU
Stage Size [mm]		15×15	25×25	40×40	60×60	65×65
Axes of Travel		X 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)
Max. Moment Capacity	Straightness [μm]	10	10	10	10	10
	Pitch [N·m]	0.5	2.0	4.0	5.1	5.1
	Roll [N·m]	0.5	2.0	3.75	5.1	5.1
Moment Stiffness	Yaw [N·m]	0.2	1.0	3.0	4.0	4.0
	Pitch [°/N·cm]	8.0	2.0	0.61	0.4	0.35
Parallelism [μm]	Roll [°/N·cm]	7.0	1.5	0.51	0.3	0.35
		50	50	50	50	50
Weight [kg]		0.02	0.06	0.2	0.5	0.7

Application Systems

Optics & Optical Coatings

Opto-Mechanics

Bases

Manual Stages

Actuators & Adjusters

Motorized Stages

Light Sources & Laser Safety

Index

Guide

X Axis Stages

XY Axis Stages

Z Axis Stages

XZ Axis Stages

XYZ Axis Stages

Rotation Stages

Goniometer

Tilt Stages

Vacuum

Ball Bearing Guide

Crossed Roller

Dovetail

Lapping

V Groove Screw

Others

15 × 15 mm

25 × 25 mm

40 × 40 mm

60 × 60 mm

65 × 65 mm

80 × 80 mm

100 × 100 mm

120 × 120 mm

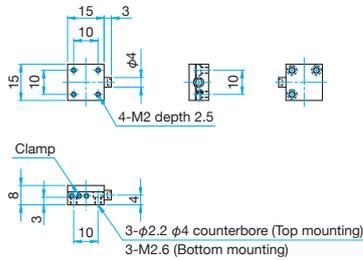
Others



Outline Drawing

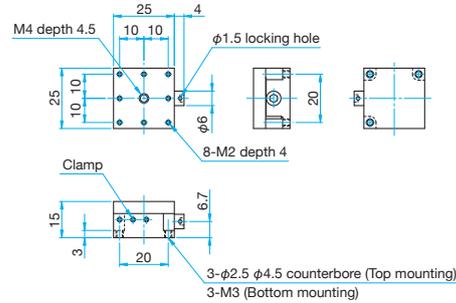
TASB-151

- ☐ Pan head screw M2x5...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



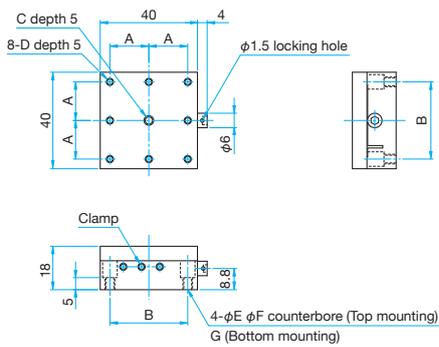
TASB-251

- ☐ Pan head screw M2x6...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-401/401UU

- ☐ Pan head screw M3x8...4 screws, One 3mm hex wrench with knob, One 1.5mm hex wrench
- ☐ Hexagonal socket head cap screw 6-32UNCx3/8...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

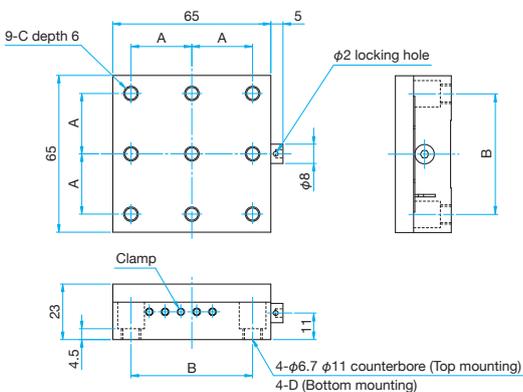


☉ Adjustment wrench size B=3

Part Number	A (mm)	B (mm)	C	D	E (mm)	F (mm)	G
TASB-401	16	32	M4	M3	3.3	6	4-M4
TASB-401UU	15.875	31.75	8-32UNC	6-32UNC	4	6.5	

TASB-651-M6/651UU

- ☐ 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)
- ☉ hex wrench with knob size 3mm, hex wrench size for clamp 1.5mm



☉ Adjustment wrench size B=3

Part Number	A (mm)	B (mm)	C	D
TASB-651-M6	25	50	M6	M8
TASB-651UU	25.4	50.8	1/4-20UNC	5/16-18UNC

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Index

Guide

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Z Axis Stages
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15 × 15 mm
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60 × 60 mm
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80 × 80 mm
100 × 100 mm
120 × 120 mm
Others