

XYZ Axis Preset Dovetail Translation Stages

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

TASB-5

RoHS

XYZ axis translation stages with horizontal top plate.
Space saving design offers compact footprints.
Appropriate 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.

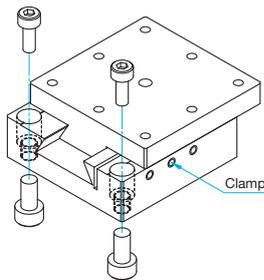


Guide

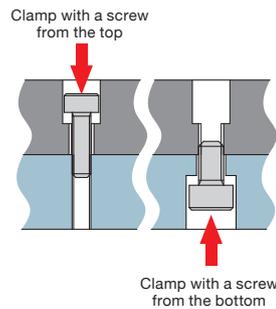
► A hex wrench, knurled knob, and locking wrench are included.



Mounting Method



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-155	M2	M2.6
TASB-255	M2	M3
TASB-405	M3	M4
TASB-405UU	6-32UNC	—
TASB-605	M4	M5
TASB-655-M6	M6	M8
TASB-655UU	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-155	TASB-255	TASB-405	TASB-605	TASB-655-M6
	INCH	—	—	TASB-405UU	—	TASB-655UU
Stage Size [mm]		15×15	25×25	40×40	60×60	65×65
Axes of Travel		XYZ axis				
Travel [mm]		XY axis ±2 Z axis +2 / -0	XY axis ±3 Z axis +3 / -0	XY axis ±7 Z axis +5 / -0	XY axis ±10 Z axis +7 / -0	XY axis ±12.5 Z axis +7 / -0
Screw Pitch [mm]		0.4	0.5	0.5	0.5	0.5
Guide Method		Dovetail slide method				
Primary Material		Brass				
Finish		Black matte				
Load Capacity [N]		4.9 (0.5kgf)	6.9 (0.7kgf)	29.4 (3.0kgf)	98.1 (10.0kgf)	98.1 (10.0kgf)
Travel Accuracy	Straightness [μm]	30	30	30	30	30
Max. Moment Capacity	Pitch [N·m]	—	0.3	0.5	1.0	1.0
	Roll [N·m]	—	0.3	0.5	1.0	1.0
Moment Stiffness	Pitch [°/N·cm]	—	9.7	5.8	1.5	1.5
	Roll [°/N·cm]	—	7.7	3.7	2.5	2.5
Parallelism [μm]		200	200	200	200	200
Weight [kg]		0.04	0.16	0.53	1.73	2.22

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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

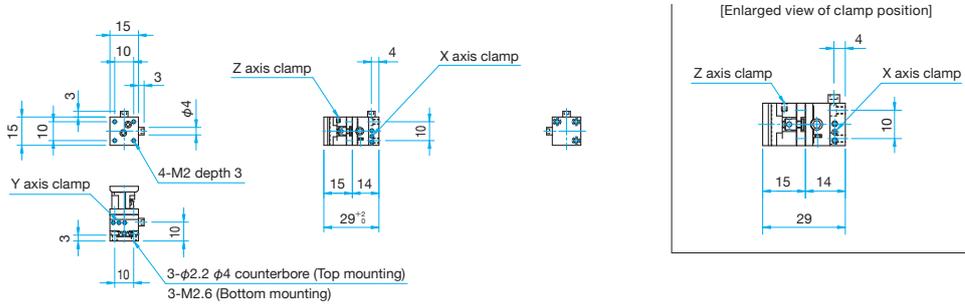
120 × 120 mm

Others

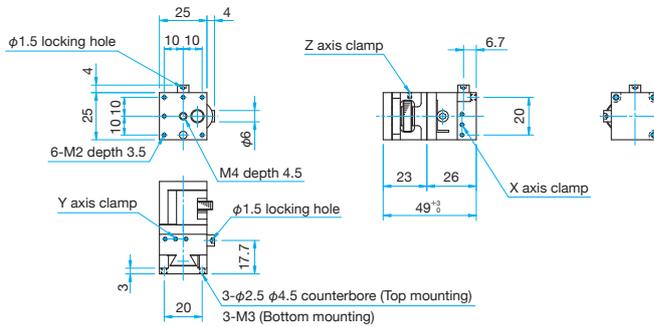


Outline Drawing

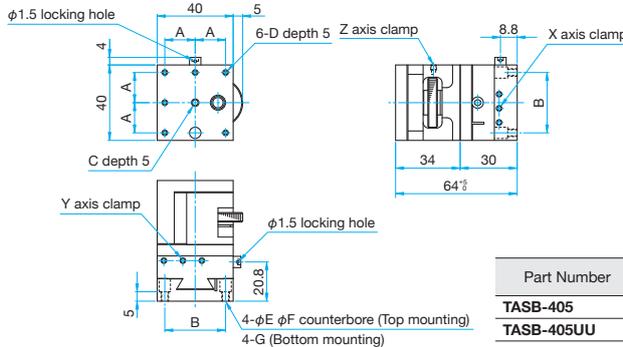
- TASB-155** Pan head screw M2x5...3 screws, One 2.5mm hex wrench with knob, One 0.89mm hex wrench XY axis=Wrench size for adjustment 2.5mm, Z axis=Adjustment hole size ϕ 1.8mm Wrench size for clamp common to XYZ axes=0.89mm



- TASB-255** Pan head screw M2x6...3 screws, One 3mm hex wrench with knob, One 0.89mm hex wrench Wrench size for adjustment XY axes=3mm, Wrench size for clamp common to XYZ axes=0.89mm



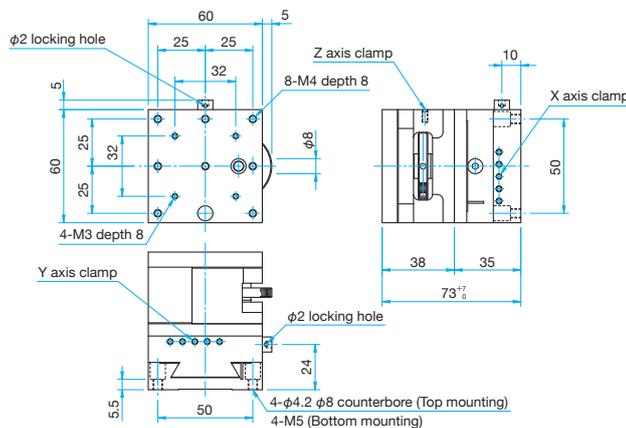
- TASB-405/405UU** Pan head screw M3x8...4 screws, One 3mm hex wrench with knob, One 1.5mm hex wrench Hexagonal socket head cap screw 6-32UNCx3/8...4 screws, One 3mm hex wrench with knob, One 1.5mm hex wrench (UU) Wrench size for adjustment XY axis=3mm, Wrench size for clamp common to XYZ axes=1.5mm One 3mm hex wrench with knob, hex wrench size for clamp 1.5mm (UU)



Part Number	A (mm)	B (mm)	C	D	E (mm)	F (mm)	G
TASB-405	16	32	M4	M3	3.3	6	M4
TASB-405UU	15.875	31.75	8/32UNC	6-32UNC	4	6.5	

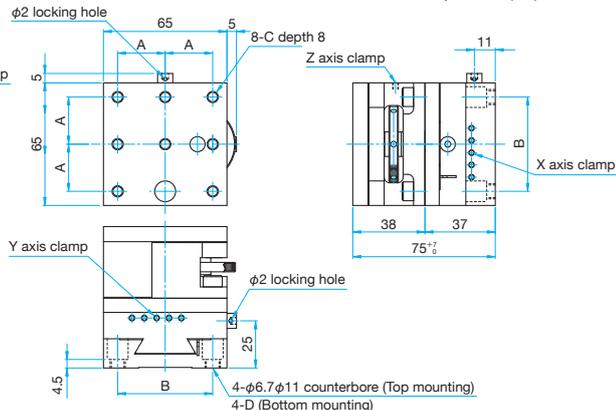
TASB-605

- Hexagonal socket head cap screw M4x10...4 screws, One 3mm hex wrench with knob, One 1.5mm hex wrench XY axes=Wrench size for adjustment 3mm, Z axis=Adjustment hole size ϕ 3mm Wrench size for clamp common to XYZ axes=1.5mm



TASB-655-M6/655UU

- 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 size with knob 3mm, hex wrench size for clamp 1.5mm (M6) Hex wrench size with knob 3mm, hex wrench size for clamp 1.5mm (UU)



Part Number	A (mm)	B (mm)	C	D
TASB-655-M6	25	50	M6	M8
TASB-655UU	25.4	50.8	1/4-20UNC	5/16-18UNC

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Ohters

15 × 15 mm

25 × 25 mm

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65 × 65 mm

80 × 80 mm

100 × 100 mm

120 × 120 mm

Others