XZ Axis Preset Dovetail Translation Stages

TASB-4



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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**

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

XZ axis translation stages with horizontal top plate. Space saving design offers compact footprints. Appropriate for system integration.

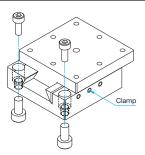
- Ideal for system integration where fine alignment is made, the stage is locked, and the system is sealed or closed.
- Multiple square footprints available.
- Minimal protrusions, including the adjustment knob, to fit within tight locations.
- Lockable with the use of a small locking set screw and wrench.



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



Mounting Method



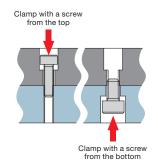
About Mounting Holes

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-154	M2	M2.6		
TASB-254	M2	M3		
TASB-404	M3	M4		
TASB-404UU	6-32UNC	_		
TASB-604	M4	M5		
TASB-654-M6	M6	M8		
TASB-654UU	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.

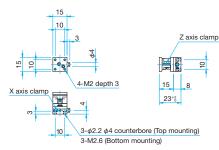
Specification	3								
Part Number	METRIC	TASB-154	TASB-254	TASB-404	TASB-604	TASB-654-M6			
Part Number	INCH	-	-	TASB-404UU	-	TASB-654UU			
Stage Size [mm]		15×15	25×25	40×40	60×60	65×65			
Axes of Travel		XZ axis							
Travel [mm]		X axis ±2 Z axis +2 / -0	X axis ±3 Z axis +3 / -0	X axis ±7 Z axis +5 / -0	X axis ±10 Z axis +7 / -0	X 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	Pitch [N·m]	_	0.3	0.5	1.0	1.0			
Capacity	Roll [N·m]	_	0.3	0.5	1.0	1.0			
M Otiff	Pitch ["/N·cm]	_	8.2	5.2	1.1	1.1			
Moment Stiffness	Roll ["/N·cm]	-	5.6	3.1	2.1	2.1			
Parallelism [µm]		150	150	150	150	150			
Weight [kg]		0.03	0.11	0.4	1.4	1.8			





Outline Drawing

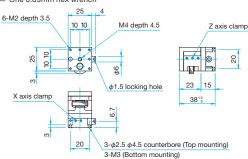
Pan head screw M2×5...3 screws, One 2.5mm hex wrench with knob, One 0.89mm hex wrench TASB-154



 $\hfill X$ axis=Wrench size for adjustment 2.5mm, Z axis=Adjustment hole size ϕ 1.8mm Wrench size for clamp common to X and Z axes=0.89mm



TASB-254 Pan head screw M2×6...3 screws, One 3mm hex wrench with knob, One 0.89mm hex wrench

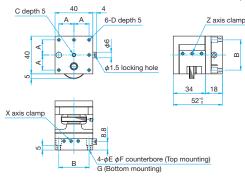


Wrench size for adjustment X axis=3mm, Wrench size for clamp common to X and Z axes=0.89mm



TASB-404/404UU 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)

Wrench size for adjustment X axis=3mm, Wrench size for clamp common to X and Z axes=1.5mm One 3mm hex wrench with knob,hex wrench size for clamp 1.5mm (UU)

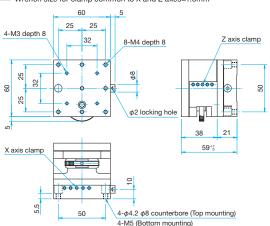


Part Number	A (mm)	B (mm)	С	D	E (mm)	F (mm)	G
TASB-404	16	32	M4	M3	3.3	6	M4
TASB-404UU	15.875	31.75	8-32UNC	6-32UNC	4	6.5	

TASR-604

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

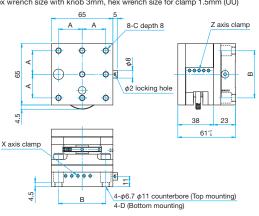
X axis=Wrench size for adjustment 3mm, Z axis=Adjustment hole size φ3mm Wrench size for clamp common to X and Z axes=1.5mm



TASB-654-M6/654UU

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 6-32UNCx3/8...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)	С	D
TASB-654-M6	25	50	M6	M8
TASB-654UU	25.4	50.8	1/4-20UNC	5/16-18UNC

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