

XZ Axis Leadscrew Translation Stages

XZ Axis Rack and Pinion Dovetail Translation Stages

TAS-4L

RoHS

Catalog Code W7069

TAR-4L

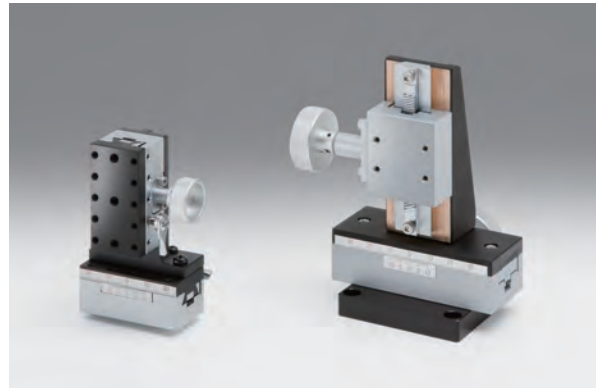
RoHS

Catalog Code W7070

TAS model : XZ axis leadscrew dovetail translation stages with rectangular form factor, enabling longer travel with fine adjustment.

TAR model : XZ axis rack and pinion dovetail translation stages, suitable for frequent use that requires quick movement and long travel.

- **TAR-4D model :** The TAR series translation stages have dovetail rack and pinion guides. They are suitable for frequent operations that require quick motion and long travel. This model incorporates a coarse and fine adjustment.

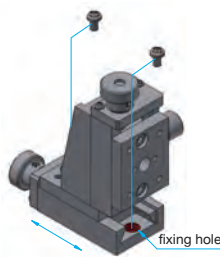


Guide

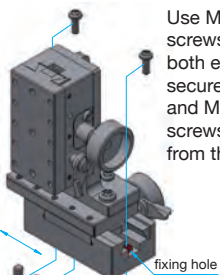
- Micrometer brackets may extend above the top surface of some stages. Check drawings for more information.

Mounting Method

■ TAS-24304L



■ TAR-25504L



Use M3 pan head screws (only on both edges) to secure from the top, and M4 pan head screws to secure from the bottom.

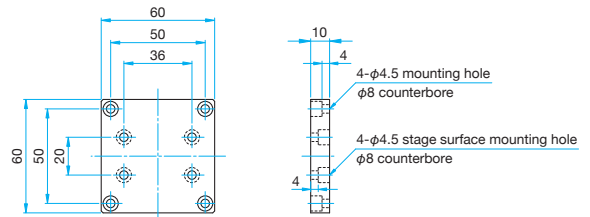
Components

Part Number	TAR-25504L
Z Axis	TARW-25503L
X Axis	TARW-25501

Bottom Plate

Primary material: Aluminum
Finish: Black Anodized

TAR-34804L include a base plate that allows mounting on instruments or bases fitted with M4 tapped holes on 50 × 50mm, preventing the handle from contacting the mounting surface.



Specifications

Part Number	METRIC	TAS-24304L	TAS-20604L	TAR-25504L	TAR-34804L	TAR-38404L-M6	TAR-60554D	TAR-60704D
	INCH	—	—	—	—	TAR-38404LUU	—	—
Stage Size [mm]		24×30	18×60	25×50	34×40	38×40	60×60	60×60
Axes of Travel		XZ axis						
Travel [mm]		X axis ±4 Z axis ±4	X axis ±7.5 Z axis ±7.5	X axis ±10 Z axis ±10	X axis ±25 Z axis ±25 / -20	X axis ±15 Z axis ±25 / -20	X axis +27 / -0 Z axis +18 / -0	X axis +37 / -0 Z axis +33 / -1
Lead of Actuator [mm/rotation]		0.5	0.5	about 20	about 20	about 20	Coars: about 20 Fine: about 2.5	Coars: about 20 Fine: about 2.5
Vernier Readable Resolution [mm]		—			0.1			
Guide Method		Dovetail slide method						
Primary Material		Brass						
Finish		Super black chrome						
Load Capacity [N]		4.9 (0.5kgf)	9.8 (1.0kgf)	9.8 (1.0kgf)	14.7 (1.5kgf)	14.7 (1.5kgf)	24.5 (2.5kgf)	24.5 (2.5kgf)
Travel Accuracy	Straightness [μm]	20	20	30	30	30	30	30
Max. Moment Capacity	Pitch [N·m]	0.5	0.2	0.5	0.5	0.5	0.4	0.4
	Roll [N·m]	0.2	0.2	0.5	0.5	0.5	0.5	0.5
Moment Stiffness	Pitch [°/N·cm]	—	—	3.98	2	2	—	—
Weight [kg]		0.42	1.0	0.52	1.1	1.2	0.83	0.85

Application Systems

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XZ Axis Stages

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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

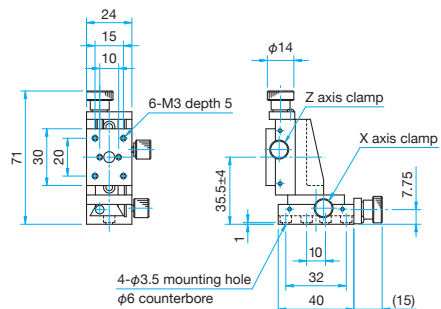
120 × 120 mm

Others

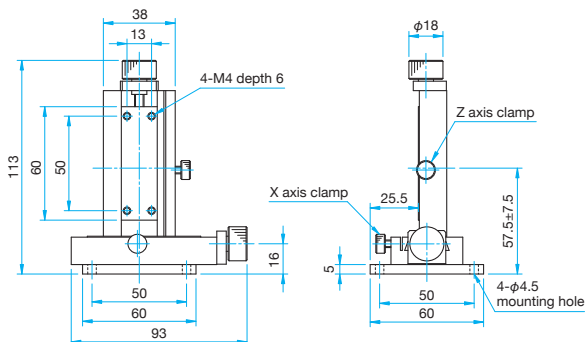


Outline Drawing

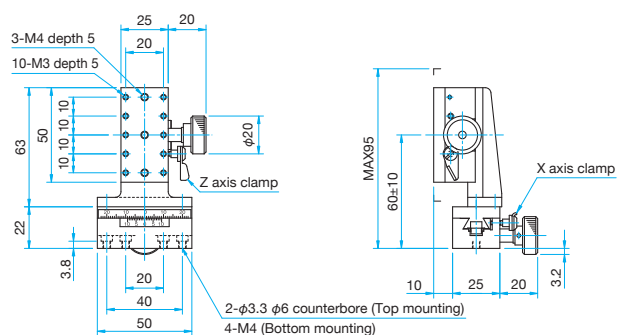
TAS-24304L Pan head screw M3×5...4 screws



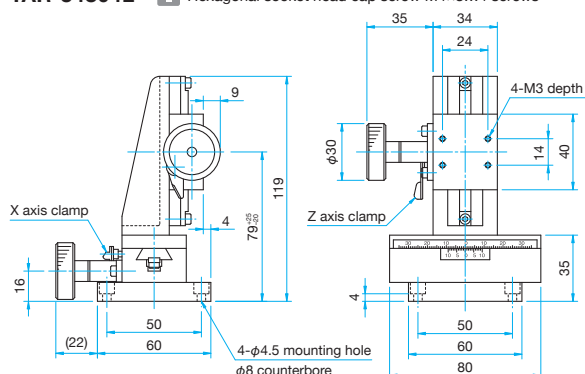
TAS-20604L Hexagonal socket head cap screw M4×10...4 screws



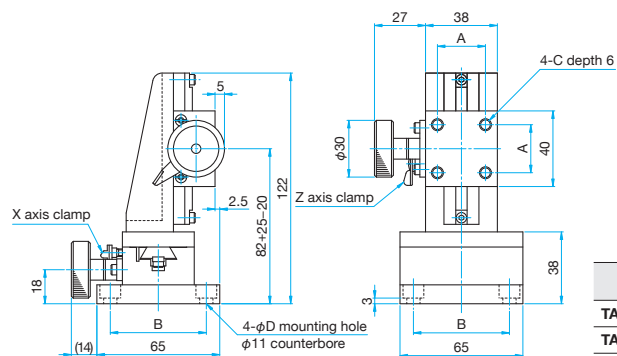
TAR-25504L Pan head screw M3×8...4 screws



TAR-34804L Hexagonal socket head cap screw M4×8...4 screws

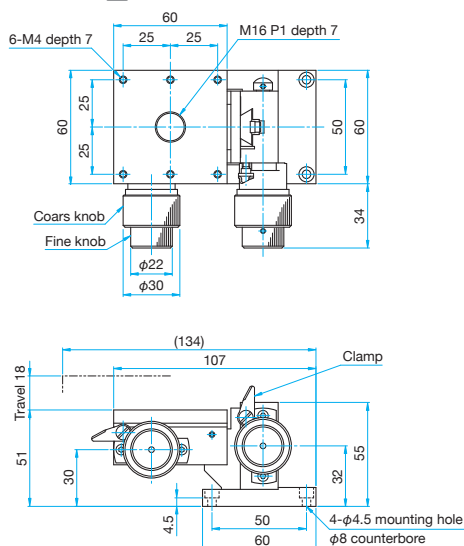


TAR-38404L-M6/38404LUU Hexagonal socket head cap screw M6×10...4 screws (M6)
Hexagonal socket head cap screw 1/4-20UNC×3/8...4 screws (UU)



Part Number	A (mm)	B (mm)	C	D (mm)
TAR-38404L-M6	25	50	M6	6.5
TAR-38404LUU	25.4	50.8	1/4-20UNC	7

TAR-60554D Hexagonal socket head cap screw M4×8...4 screws



TAR-60704D Hexagonal socket head cap screw M4×8...4 screws

