

# XYZ Axis Leadscrew Translation Stages

## XYZ Axis Rack and Pinion Dovetail Translation Stages

TAS-5L

TAR-5L

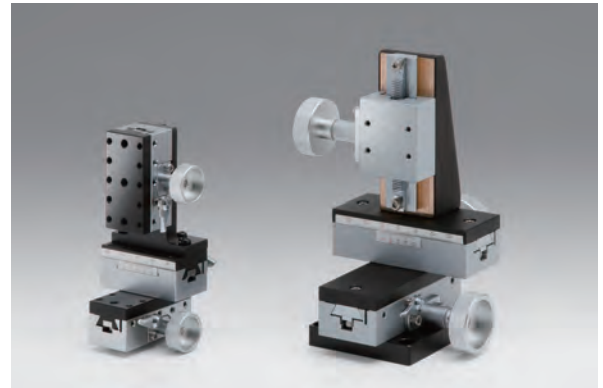
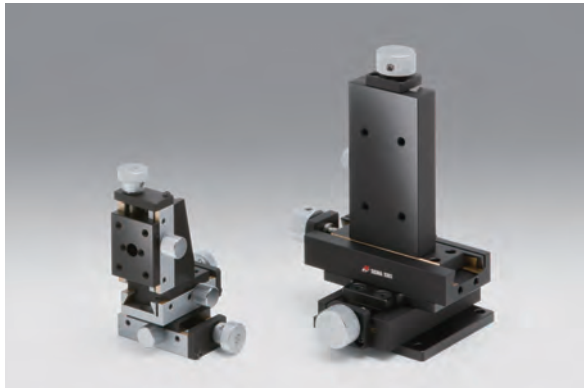
RoHS

RoHS

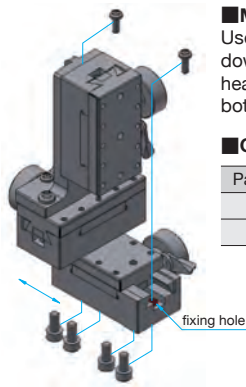
**TAS model :** XYZ axis leadscrew dovetail translation stages with rectangular form factor, enabling longer travel with fine adjustment.

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

- Low cost, high stability, and long travel due to form factor.
- Large adjustment knob provides high sensitivity.



### Guide



#### ■ Mounting Method of TAR-25505L

Use M3 pan head screws when mounting down to a base, from the top, and M4 pan head screws for mounting from the bottom.

#### ■ Components

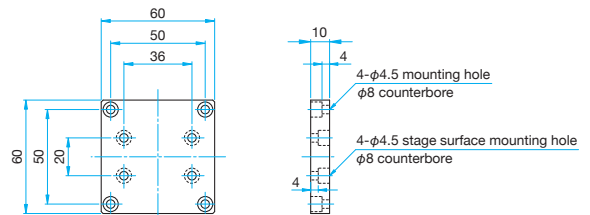
Part Number	TAR-25505L
Z axis	TARW-25503L
XY axis	TARW-25502

### Attention

- ▶ Micrometer brackets may extend above the top surface of some stages. Check drawings for more information.
- ▶ Note that some samples might not be able to be fixed on the stage depending on their shapes, or required travel might not be ensured.

**Bottom Plate** Primary material: Aluminum  
Finish: Black Anodized

TAR-34805L 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-24305L	TAS-20605L	TAR-25505L	TAR-34805L	TAR-38405L-M6
	INCH	—	—	—	—	TAR-38405LUU
Stage Size [mm]		24×30	18×60	25×50	34×40	38×40
Axes of Travel		XYZ axis				
Travel [mm]		XY axis ±4 Z axis ±4	XY axis ±7.5 Z axis ±7.5	XY axis ±10 Z axis ±10	XY axis ±25 Z axis +25 / -20	XY axis ±15 Z axis +25 / -20
Lead of Actuator [mm/rotation]		0.5	0.5	about 20	about 20	about 20
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)
Travel Accuracy	Straightness [μm]	30	30	30	30	30
	Pitch [N·m]	0.1	0.1	0.5	0.5	1.5
Max. Moment Capacity	Roll [N·m]	0.1	0.1	0.5	0.5	1.0
	Weight [kg]	0.62	1.5	0.75	2.1	1.8

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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

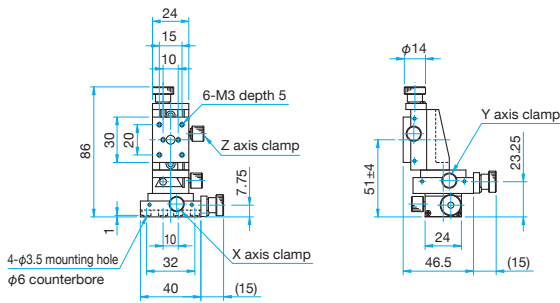
120 × 120 mm

Others

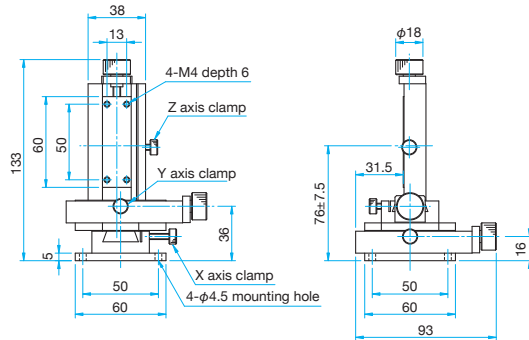


Outline Drawing

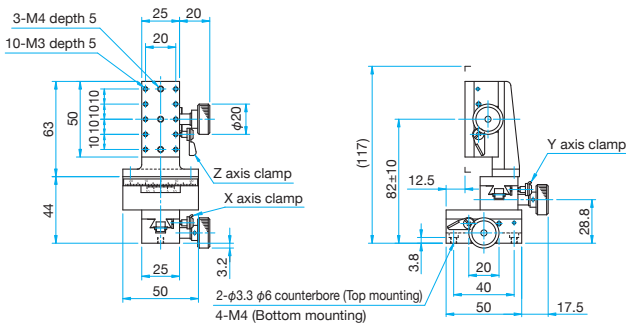
TAS-24305L Pan head screw M3x5...4 screws



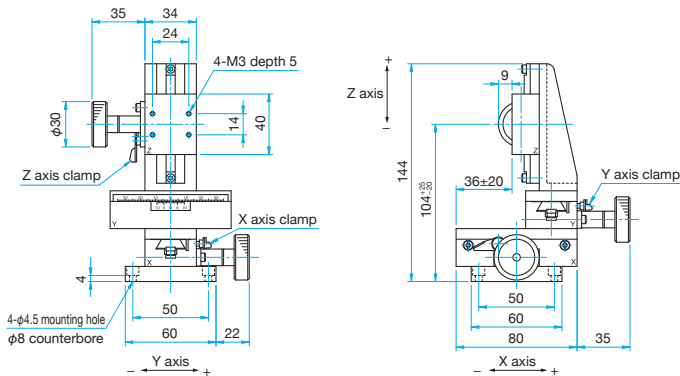
TAS-20605L Hexagonal socket head cap screw M4x10...4 screws



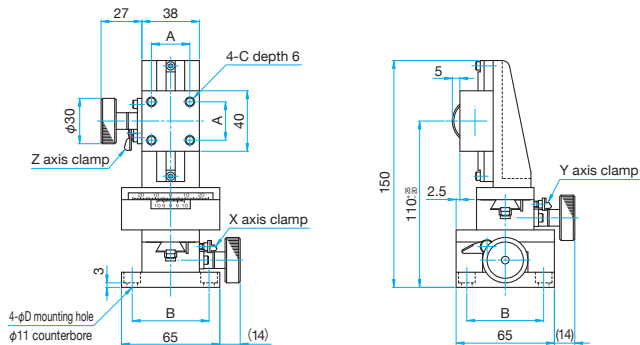
TAR-25505L Pan head screw M3x8...4 screws



TAR-34805L Hexagonal socket head cap screw M4x8...4 screws



TAR-38405L-M6/38405LUU Hexagonal socket head cap screw M6x10...4 screws (M6)  
Hexagonal socket head cap screw 1/4-20UNCx3/8...4 screws (UU)



Part Number	A (mm)	B (mm)	C	D (mm)
TAR-38405L-M6	25	50	M6	6.5
TAR-38405LUU	25.4	50.8	1/4-20UNC	7

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