Z Axis Rack and Pinion Dovetail Translation Stages (Vertical)
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TARW-L RoHS Catalog Code W7052
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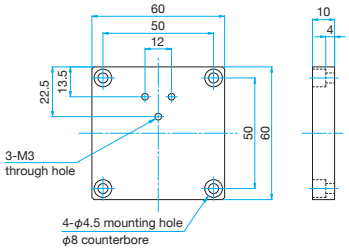
Z axis rack and pinion dovetail translation stages, suitable for frequent use that requires quick movement and long travel.

- The TAR series translation stages have dovetail rack and pinion guides.
- They are suitable for frequent operations that require quick motion and long travel.
- The model TAR-60553D model and TAR-60703D incorporates a course and fine adjustment.

TAR-34403L Bottom Plate

Primary material: Aluminum
Finish: Black Anodized

TAR-34403L 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

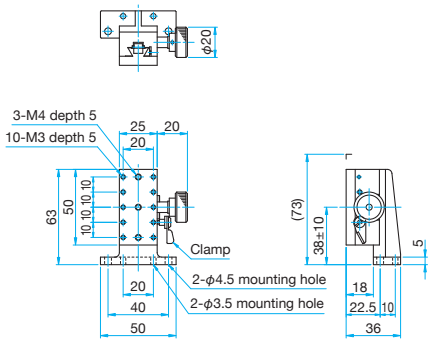
Part Number		TARW-25503L	TAR-34403L	TAR-34603L	TAR-34803L	TAR-38403L-M6	TAR-60553D	TAR-60703D
	INCH	—	—	—	—	TAR-38403LUU	—	—
Stage Size [mm]		25×50	34×40	34×60	34×80	38×40	60×60	60×60
Axes of Travel		Z axis						
Travel [mm]		±10	+25 / –20	±15	+20 / –10	+25 / –20	Coars: +18 / –0 Fine: +18 / –0	Coars: +33 / –0 Fine: +33 / –0
Lead of Actuator [mm/rotation]		about 20	about 20	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	0.1	0.1	0.1	0.1	0.1	0.1
Guide Method		Dovetail slide method						
Primary Material		Brass / Aluminum						
Finish		Super black chrome / Black anodized						
Load Capacity [N]		9.8 (1.0kgf)	14.7 (1.5kgf)	14.7 (1.5kgf)	14.7 (1.5kgf)	14.7 (1.5kgf)	14.7 (1.5kgf)	14.7 (1.5kgf)
Travel Accuracy	Straightness [μm]	30	20	20	30	30	20	20
Max. Moment Capacity	Pitch [N·m]	0.6	1.5	1.4	1.9	1.5	1.5	1.5
	Roll [N·m]	0.5	1.0	1.2	1.5	1.0	1.0	1.0
Moment Stiffness	Pitch [″/N·cm]	1.53	0.51	0.41	0.41	0.51	0.61	0.61
Parallelism [μm]		—	—	—	—	—	80	80
Squareness [μm]		50	50	100	100	50	—	—
Weight [kg]		0.3	0.5	0.8	1.1	0.6	0.55	0.6

2D CAD 3D CAD

Outline Drawing

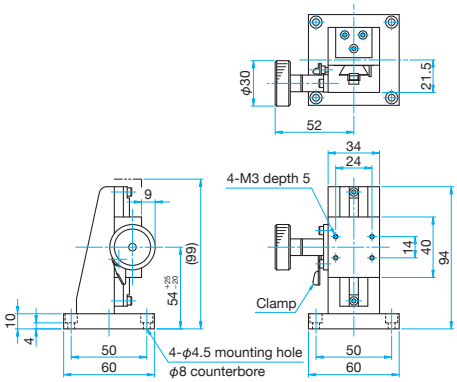
TARW-25503L

Pan head screw M3×10…2 screws
Pan head screw M4×10…2 screws



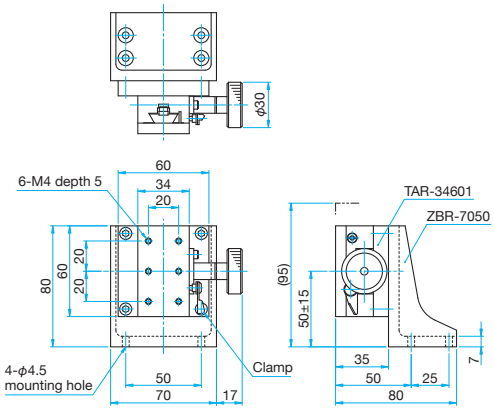
TAR-34403L

Hexagonal socket head cap screw M4×8…4 screws



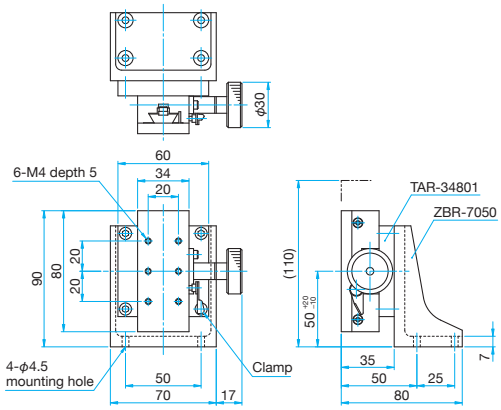
TAR-34603L

Hexagonal socket head cap screw M4×12…4 screws



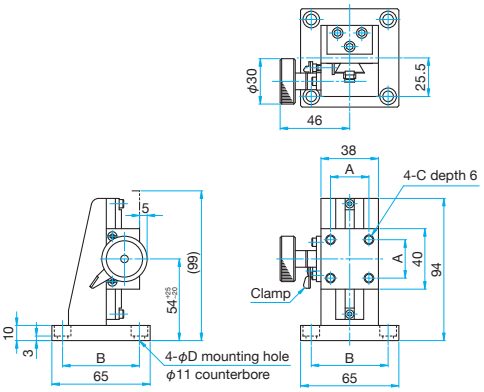
TAR-34803L

Hexagonal socket head cap screw M4×12…4 screws



TAR-38403L-M6/38403LUU

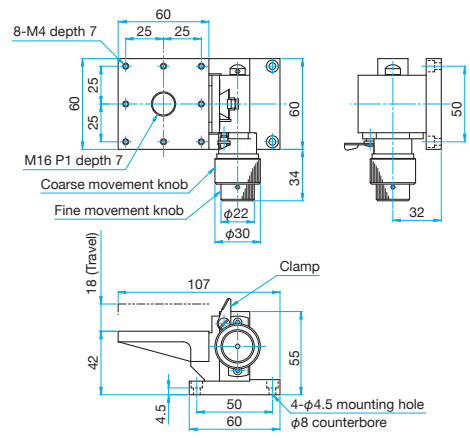
Hexagonal socket head cap screw M6×10…4 screws (M6)
Hexagonal socket head cap screw 1/4-20UNC×3/8…4 screws (UU)



Part Number	A (mm)	B (mm)	C	D (mm)
TAR-38403L-M6	25	50	M6	6.5
TAR-38403LUU	25.4	50.8	1/4-20UNC	7

TAR-60553D

Hexagonal socket head cap screw M4×8…4 screws



TAR-60703D

Hexagonal socket head cap screw M4×8…4 screws