X axis Rack and Pinion Dovetail Stages

MLT71W/MLT01 Stage size 25×30mm

RoHS

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X Axis
XY Axis
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XYZ Axis
Rotation
Goniomenters /Tilt
Multiaxis
Linear Guide

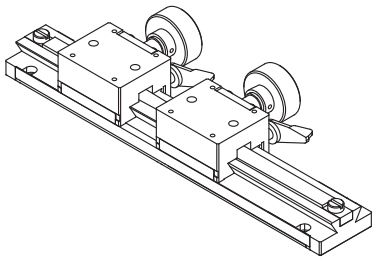
□15mm
□25mm
□50mm
□60mm
□70mm
□80mm
□100mm
□120mm
Others

Rack and pinion stages with dovetail slides, suitable for frequent operations that require quick motion and long travel.

- Long travel type dovetail stage with table size of 25×30mm.
- The feed handle and adjustment knob improved operability.

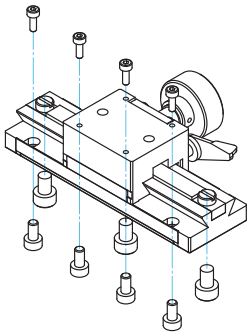
Guide

▶The TAR-25 series can be delivered with more than one movable table. Contact our International Sales Division for more information.



Mounting Method

Tapped holes are used for mounting holes (clamping holes) so that compact rack and pinion dovetail stages can be assembled in optical breadboards and systems as well as secured on other instruments from both top and bottom.



Part Number	From the top	From the bottom
MLT71W-2550	M3	M4
MLT01-2580	M2	M3, (M4)
MLT01-25120	M2	M3, (M4)
MLT01-25160	M2	M3, (M4)

Attention

▶Since the feed handle of MLT71W-2550 protrudes from the bottom surface of the stage, it cannot be directly secured on a flat surface. A recess is required using a spacer or the like.

Specifications

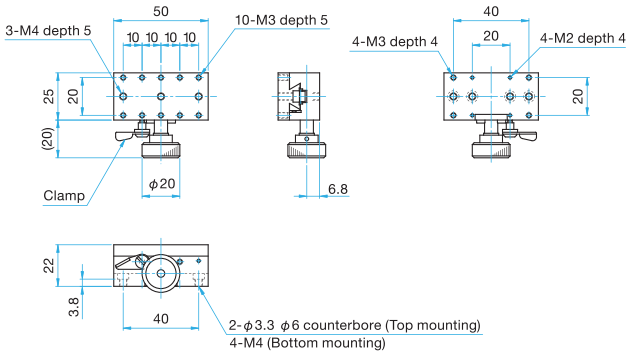
Part Number		MLT71W-2550	MLT01-2580	MLT01-25120	MLT01-25160
Table Size [mm]		25×50	25×30	25×30	25×30
Travel [mm]		±10	±25	±45	±65
Lead of Actuator [mm/rotation]		about 20	about 20	about 20	about 20
Vernier Scale [mm]		0.1	0.1	0.1	0.1
Positioning Slide		Dovetail method	Dovetail method	Dovetail method	Dovetail method
Primary Material		Brass	Brass	Brass	Brass
Finish		Super black chrome	Super black chrome	Super black chrome	Super black chrome
Load Capacity [N]		78.5 (8.0kgf)	49 (5.0kgf)	49 (5.0kgf)	49 (5.0kgf)
Travel Accuracy	Straightness [μm]	20	30	40	50
Max. Moment Capacity	Pitch [N·m]	1.2	0.5	0.5	0.5
	Roll [N·m]	0.6	0.5	0.5	0.5
	Yaw [N·m]	1.0	0.5	0.5	0.5
Moment Stiffness	Pitch [″/N·cm]	1.22	2.03	2.03	2.03
	Roll [″/N·cm]	2.45	1.53	1.53	1.53
Parallelism [μm]		50	50	80	80
Weight [kg]		0.22	0.22	0.30	0.36

2D CAD 3D CAD

Outline Drawing

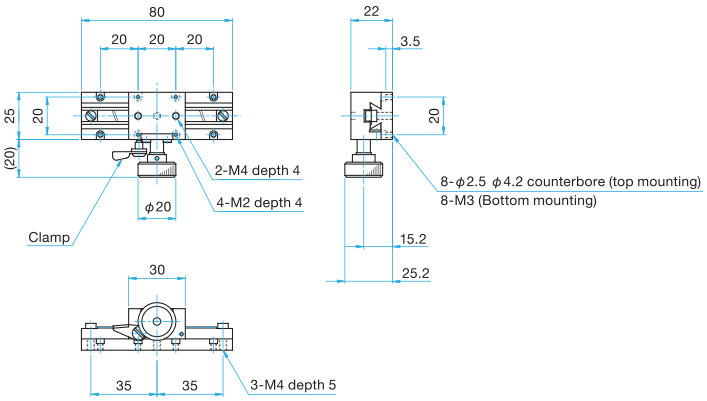
MLT71W-2550

Pan head screw M3×8…4 screws



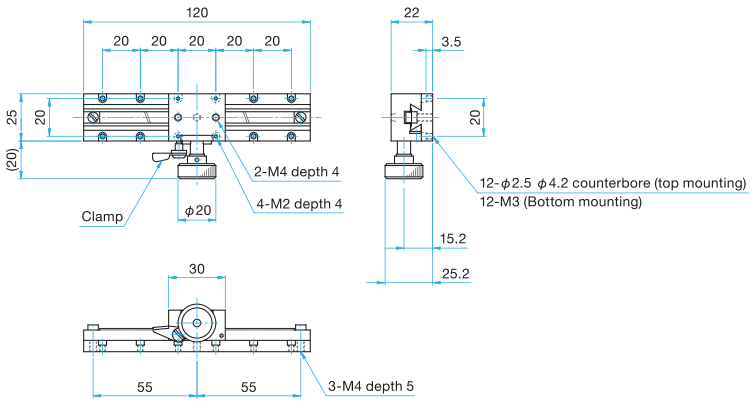
MLT01-2580

Pan head screw M2×6…4 screws



MLT01-25120

Pan head screw M2×6…6 screws



MLT01-25160

Pan head screw M2×6…8 screws