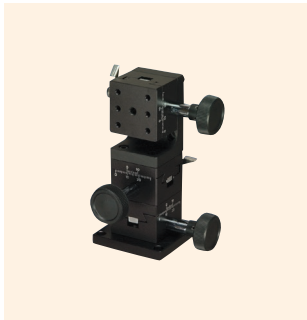


## Rack & Pinion - XYZ Stages 40 x 40



↑ TLT-412



↑ TLT-412W



↑ TLT-412S



↑ TLT-412WS

### Features

- The travel unit uses a dovetail (D-T method) for the travel guide.
- A rack & pinion is used for the feed method, achieving large travel amounts.
- Versatile use for positioning of cameras, sensors, etc.
- A lever type clamp enables fixing in a desired position with strong retention force.
- Low bracket products with a short Z bracket are available.

#### Low bracket

Model number	TLT-412L	TLT-412WL	TLT-412SL	TLT-412WSL
Model name	DT XYZ Stage 40 x 40	DT XYZ Stage 40 x 40 (Double Knob)	DT XYZ Stage 40 x 40 (Coarse/Fine Movement Knob)	DT XYZ Stage 40 x 40 (Double Coarse/Fine Movement Knob)
Travel direction	XYZ-axis triple direction			
Stage surface	40 mm x 40 mm			
Clamp method	Lever method			
Operating part mounting position	Single knob	Double knob	Single coarse/fine movement knob	Double coarse/fine movement knob
Feed method	Rack & pinion method			
Travel amount	XY axes ±10 mm, Z axis 10 mm			
Travel amount/1 knob rotation	Approx. 18 mm		Coarse movement: approx. 25.5 mm, Fine movement: approx. 3.3 mm	
Scale	Vernier reading: 0.1 mm			
Sensitivity	0.1 mm			
Travel guide	Dovetail			
Travel accuracy	Straightness: 0.03 mm			
Load capacity	19.6 N (2 kgf)			
Mass	0.64 kg	0.72 kg	0.85 kg	1.02 kg
Main materials/surface treatment	Aluminum alloy/black satin anodized finish			

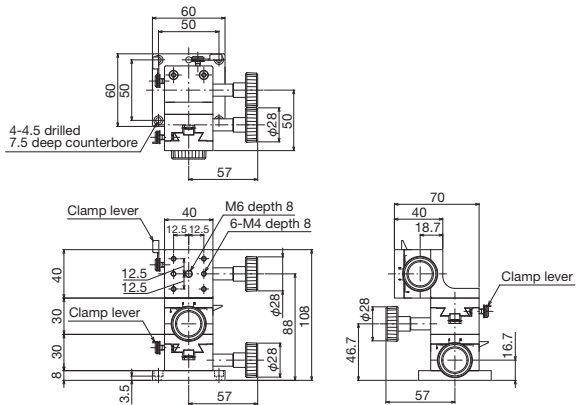
#### Regular bracket

Model number	TLT-412	TLT-412W	TLT-412S	TLT-412WS
Model name	DT XYZ Stage 40 x 40	DT XYZ Stage 40 x 40 (Double Knob)	DT XYZ Stage 40 x 40 (Coarse/Fine Movement Knob)	DT XYZ Stage 40 x 40 (Double Coarse/Fine Movement Knob)
Travel direction	XYZ-axis triple direction			
Stage surface	40 mm x 40 mm			
Clamp method	Lever method			
Operating part mounting position	Single knob	Double knob	Single coarse/fine movement knob	Double coarse/fine movement knob
Feed method	Rack & pinion method			
Travel amount	±10 mm			
Travel amount/1 knob rotation	Approx. 18 mm		Coarse movement: approx. 25.5 mm, Fine movement: approx. 3.3 mm	
Scale	Vernier reading: 0.1 mm			
Sensitivity	0.1 mm			
Travel guide	Dovetail			
Travel accuracy	Straightness: 0.03 mm			
Load capacity	19.6 N (2 kgf)			
Mass	0.67 kg	0.74 kg	0.88 kg	1.04 kg
Main materials/surface treatment	Aluminum alloy/black satin anodized finish			

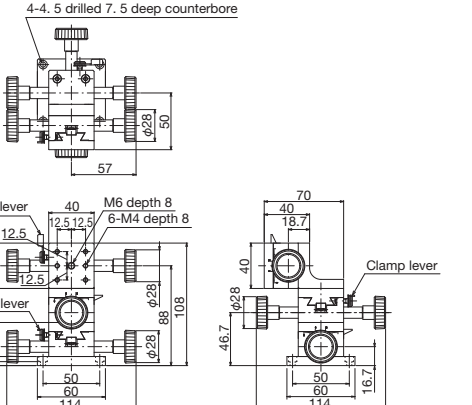


# Rack & Pinion Stages ◀ Manual Stages ◀

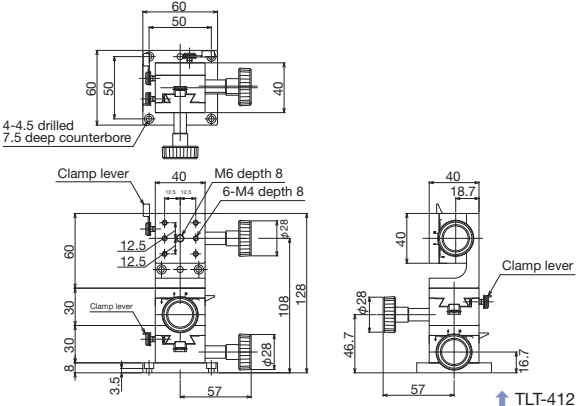
## Product Appearance



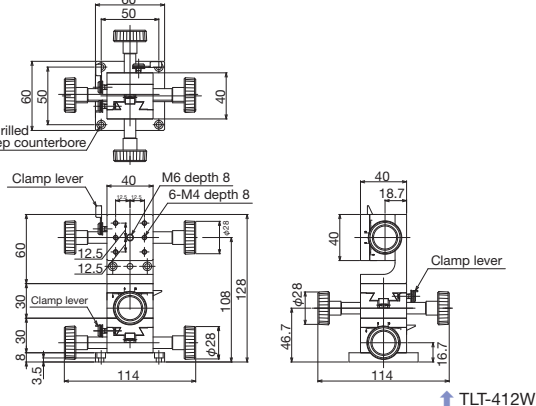
↑ TLT-412L



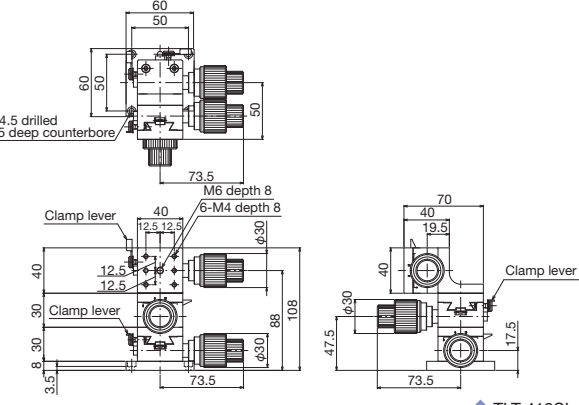
↑ TLT-412WL



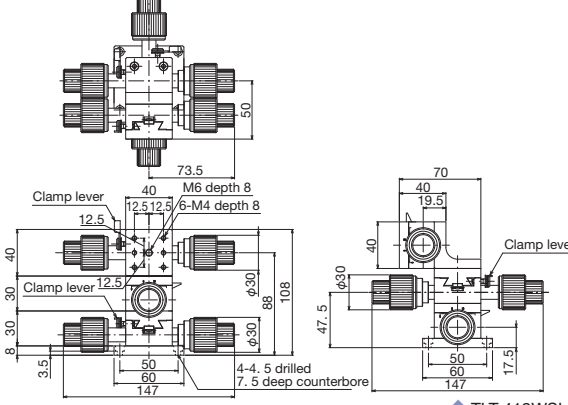
↑ TLT-412



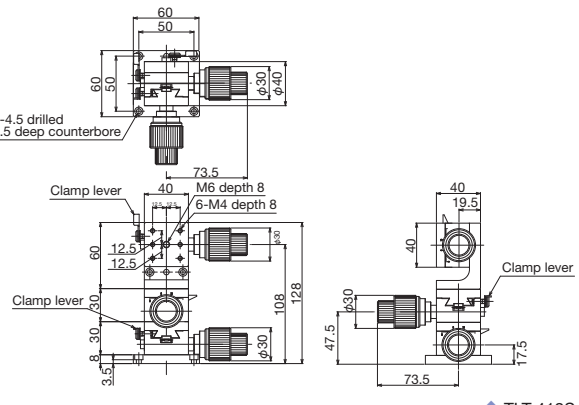
↑ TLT-412W



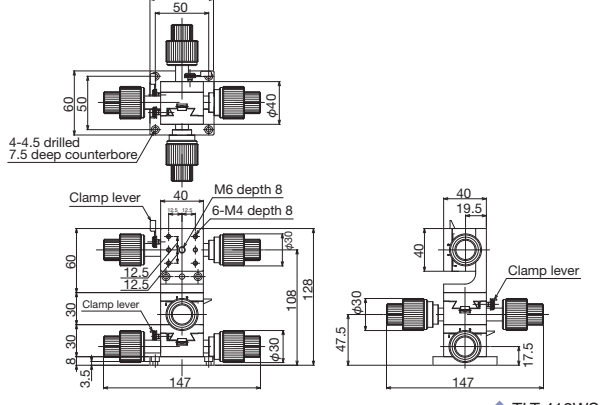
↑ TLT-412SL



↑ TLT-412WSL



↑ TLT-412S



↑ TLT-412WS

Motorized Stages
Automated Products for Microscopes
Manual Stages
Fix Stages
Thin V8 Stages
Rack & Pinion Stages
High-Grade Stages
Stein Stages, Cross Roller Stages
Z-Like Stages, Z Stages
Rotary Stages
Tilt Stages
Tilt/Rotary Stages
XZ, YZ Stages
XYZ Stages

## Rack & Pinion - XYZ Stages 40 x 60



↑ TLT-612



↑ TLT-612W



↑ TLT-612S



↑ TLT-612WS

### Features

- The travel unit uses a dovetail (D-T method) for the travel guide.
- A rack & pinion is used for the feed method, achieving large travel amounts.
- Versatile use for positioning of cameras, sensors, etc.
- A lever type clamp enables fixing in a desired position with strong retention force.
- Low bracket products with a short Z bracket are available.

#### Low bracket

Model number	TLT-612L	TLT-612WL	TLT-612SL	TLT-612WSL
Model name	DT XYZ Stage 40 x 60	DT XYZ Stage 40 x 60 (Double Knob)	DT XYZ Stage 40 x 60 (Coarse/Fine Movement Knob)	DT XYZ Stage 40 x 60 (Double Coarse/Fine Movement Knob)
Travel direction	XYZ-axis triple direction			
Stage surface	40 mm x 60 mm			
Clamp method	Lever method			
Operating part mounting position	Single knob	Double knob	Single coarse/fine movement knob	Double coarse/fine movement knob
Feed method	Rack & pinion method			
Travel amount	XY axes ±15 mm, Z axis 15 mm			
Travel amount/1 knob rotation	Approx. 18 mm		Coarse movement: approx. 25.5 mm, Fine movement: approx. 3.3 mm	
Scale	Vernier reading: 0.1 mm			
Sensitivity	0.1 mm			
Travel guide	Dovetail			
Travel accuracy	Straightness: 0.03 mm			
Load capacity	19.6 N (2 kgf)			
Mass	0.87 kg	0.94 kg	1.08 kg	1.23 kg
Main materials/surface treatment	Aluminum alloy/black satin anodized finish			

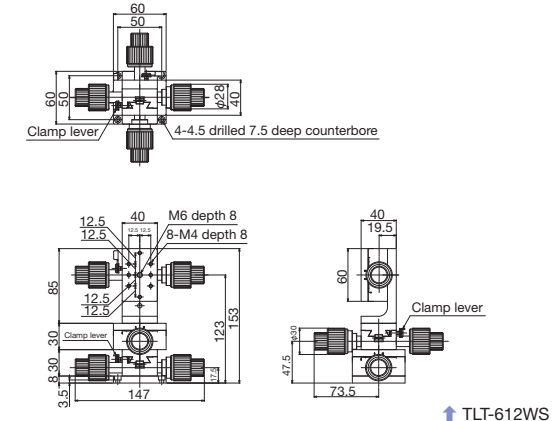
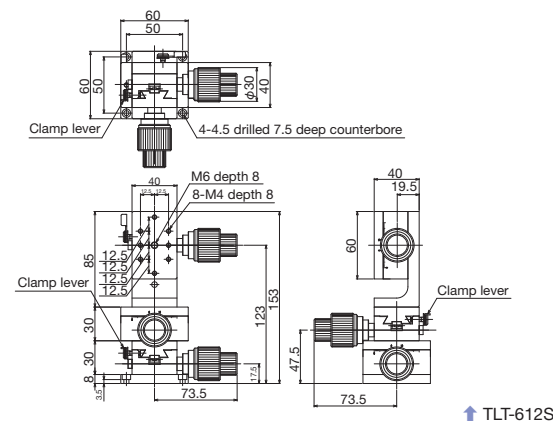
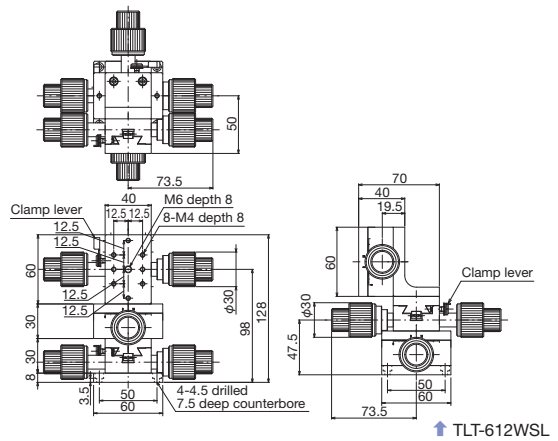
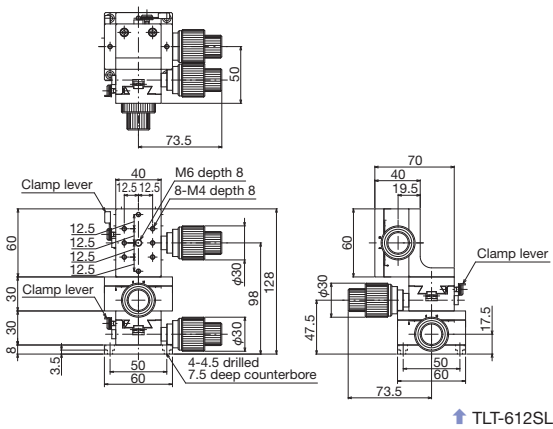
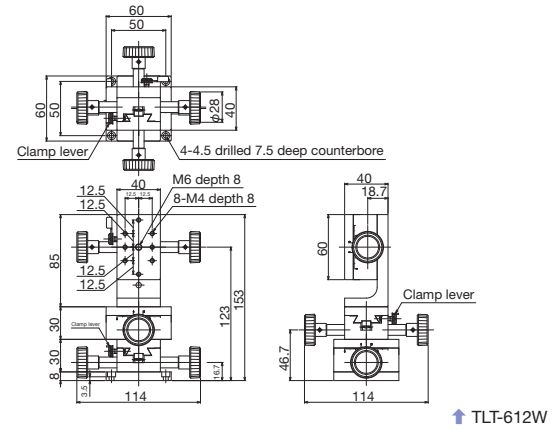
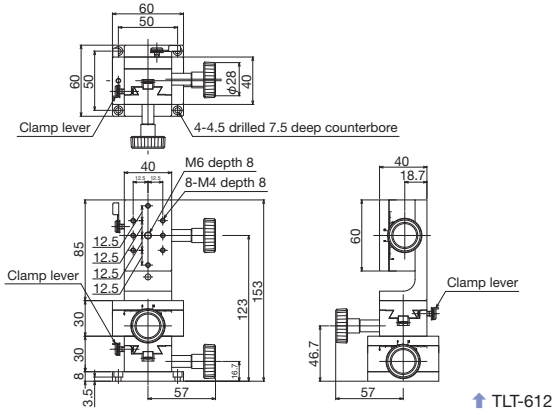
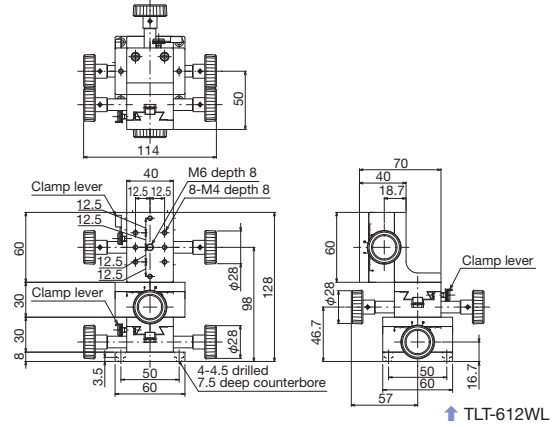
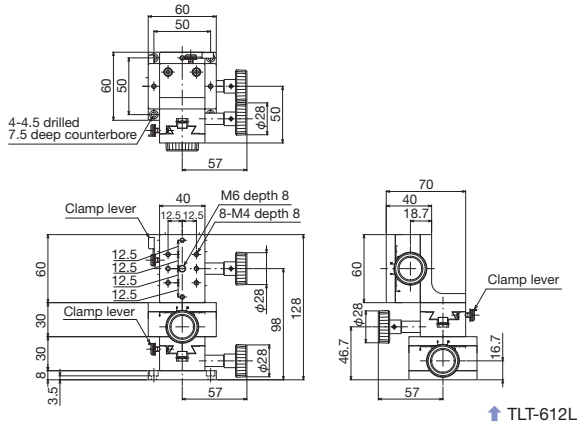
#### Regular bracket

Model number	TLT-612	TLT-612W	TLT-612S	TLT-612WS
Model name	DT XYZ Stage 40 x 60	DT XYZ Stage 40 x 60 (Double Knob)	DT XYZ Stage 40 x 60 (Coarse/Fine Movement Knob)	DT XYZ Stage 40 x 60 (Double Coarse/Fine Movement Knob)
Travel direction	XYZ-axis triple direction			
Stage surface	40 mm x 60 mm			
Clamp method	Lever Method			
Operating part mounting position	Single knob	Double knob	Single coarse/fine movement knob	Double coarse/fine movement knob
Feed method	Rack & pinion method			
Travel amount	±15 mm			
Travel amount/1 knob rotation	Approx. 18 mm		Coarse movement: approx. 25.5 mm, Fine movement: approx. 3.3 mm	
Scale	Vernier reading: 0.1 mm			
Sensitivity	0.1 mm			
Travel guide	Dovetail			
Travel accuracy	Straightness: 0.03 mm			
Load capacity	19.6 N (2 kgf)			
Mass	0.9 kg	0.98 kg	1.1 kg	1.28 kg
Main materials/surface treatment	Aluminum alloy/black satin anodized finish			



# Rack & Pinion Stages ◀ Manual Stages ◀

## Product Appearance



Motorized Stages	Automated Products for Microscopes	Manual Stages
Fix Stages	Thin V8 Stages	Rack & Pinion Stages
High-Grade Stages	Swim Stages, Cross Roller Stages	Z-Lift Stages, Rotary Stages
Tilt Stages	Tilt/Rotary Stages	XZ, YZ Stages
		XYZ Stages

## Rack & Pinion - XYZ Stages 40 x 90



↑ TLT-912



↑ TLT-912W



↑ TLT-912S



↑ TLT-912WS

### Features

- The travel unit uses a dovetail (D-T method) for the travel guide.
- A rack & pinion is used for the feed method, achieving large travel amounts.
- Versatile use for positioning of cameras, sensors, etc.
- A lever type clamp enables fixing in a desired position with strong retention force.
- Low bracket products with a short Z bracket are available.

#### Low bracket

Model number	TLT-912L	TLT-912WL	TLT-912SL	TLT-912WSL
Model name	DT XYZ Stage 40 x 90	DT XYZ Stage 40 x 90 (Double Knob)	DT XYZ Stage 40 x 90 (Coarse/Fine Movement Knob)	DT XYZ Stage 40 x 90 (Double Coarse/Fine Movement Knob)
Travel direction	XYZ-axis triple direction			
Stage surface	40 mm x 90 mm			
Clamp method	Lever method			
Operating part mounting position	Single Knob	Double Knob	Single coarse/fine movement knob	Double coarse/fine movement knob
Feed method	Rack & pinion method			
Travel amount	XY axes ±30 mm, Z axis 30 mm			
Travel amount/1 knob rotation	Approx. 18 mm		Coarse movement: approx. 25.5 mm, Fine movement: approx. 3.3 mm	
Scale	Vernier reading: 0.1 mm			
Sensitivity	0.1 mm			
Travel guide	Dovetail			
Travel accuracy	Straightness: 0.03 mm			
Load capacity	19.6 N (2 kgf)			
Mass	1.17 kg	1.24 kg	1.42 kg	1.59 kg
Main materials/surface treatment	Aluminum alloy/black satin anodized finish			

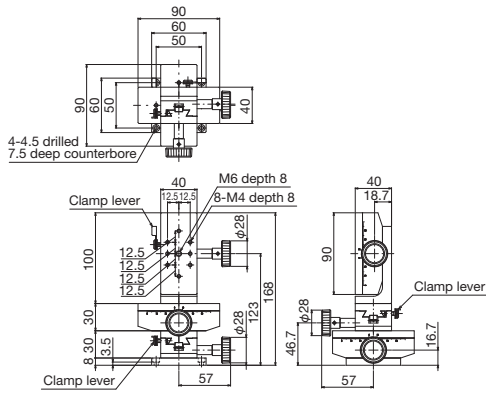
#### Regular bracket

Model number	TLT-912	TLT-912W	TLT-912S	TLT-912WS
Model name	DT XYZ Stage 40 x 90	DT XYZ Stage 40 x 90 (Double Knob)	DT XYZ Stage 40 x 90 (Coarse/Fine Movement Knob)	DT XYZ Stage 40 x 90 (Double Coarse/Fine Movement Knob)
Travel direction	XYZ-axis triple direction			
Stage surface	40 mm x 90 mm			
Clamp method	Lever method			
Operating part mounting position	Single knob	Double knob	Single coarse/fine movement knob	Double coarse/fine movement knob
Feed method	Rack & pinion method			
Travel amount	±30 mm			
Travel amount/1 knob rotation	Approx. 18 mm		Coarse movement: approx. 25.5 mm, Fine movement: approx. 3.3 mm	
Scale	Vernier reading: 0.1 mm			
Sensitivity	0.1 mm			
Travel guide	Dovetail			
Travel accuracy	Straightness: 0.03 mm			
Load capacity	19.6 N (2 kgf)			
Mass	1.2 kg	1.27 kg	1.44 kg	1.61 kg
Main materials/surface treatment	Aluminum alloy/black satin anodized finish			

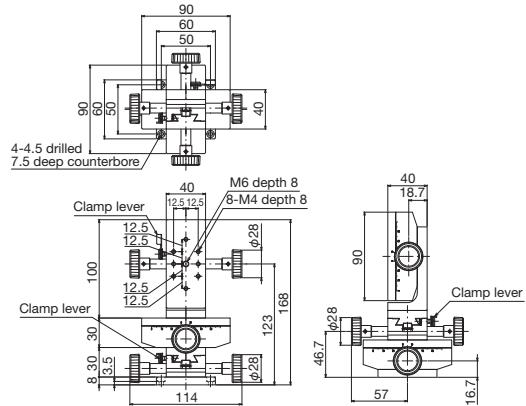


# Rack & Pinion Stages ◀ Manual Stages ◀

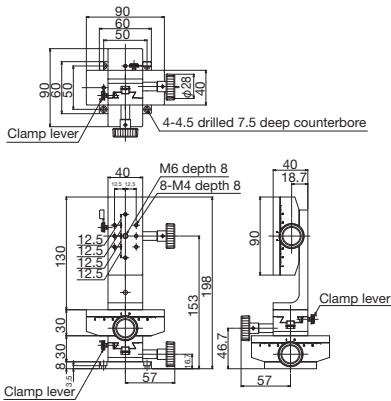
## Product Appearance



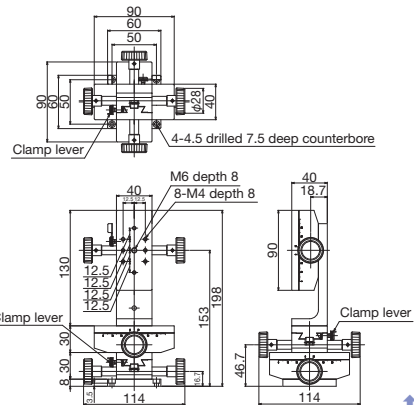
↑ TLT-912L



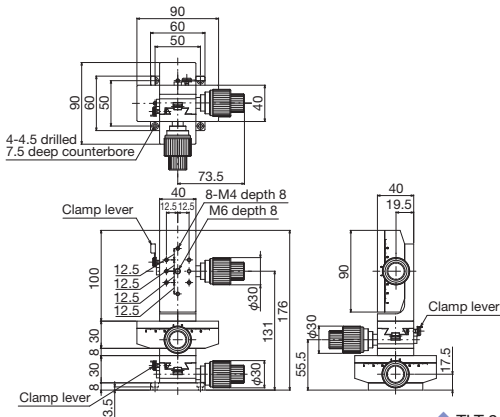
↑ TLT-912WL



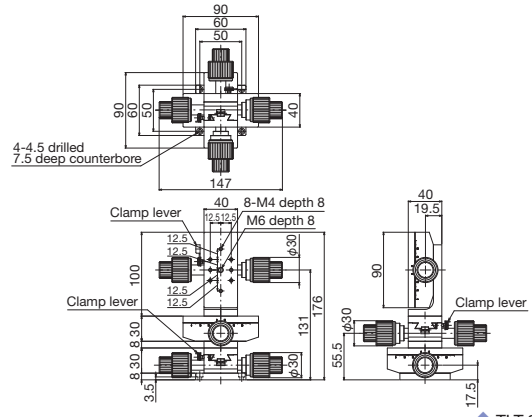
↑ TLT-912



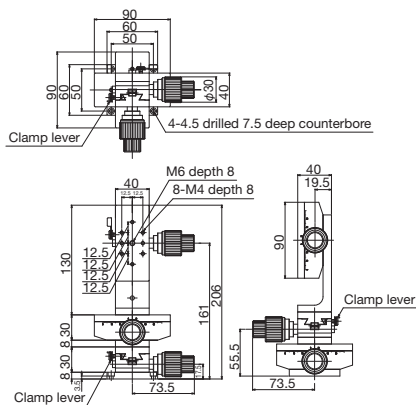
↑ TLT-912W



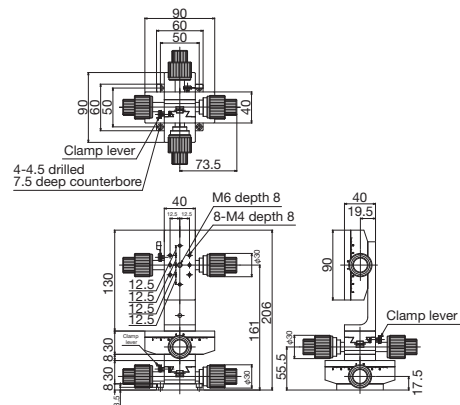
↑ TLT-912SL



↑ TLT-912WSL



↑ TLT-912S



↑ TLT-912WS

Motorized Stages	Automated Products for Microscopes
Manual Stages	
Fix Stages	
Thin VB Stages	
Rack & Pinion Stages	
High-Grade Stages	
Swim Stages, Cross Roller Stages	
Z-Lift Stages, Z Stages	
Rotary Stages	
Tilt Stages	
Tilt/Rotary Stages	
XZ, YZ Stages	
XYZ Stages	

## Rack & Pinion - XYZ Stages 40 x 140



↑ TLT-112



↑ TLT-112W



↑ TLT-112S



↑ TLT-112WS

### Features

- The travel unit uses a dovetail (D-T method) for the travel guide.
- A rack & pinion is used for the feed method, achieving large travel amounts.
- Versatile use for positioning of cameras, sensors, etc.
- A lever type clamp enables fixing in a desired position with strong retention force.
- Low bracket products with a short Z bracket are available.

#### Low bracket

Model number	TLT-112L	TLT-112WL	TLT-112SL	TLT-112WSL
Model name	DT XYZ Stage 40 x 140	DT XYZ Stage 40 x 140 (Double Knob)	DT XYZ Stage 40 x 140 (Coarse/Fine Movement Knob)	DT XYZ Stage 40 x 140 (Double Coarse/Fine Movement Knob)
Travel direction	XYZ-axis triple direction			
Stage surface	40 mm x 140 mm			
Clamp method	Lever method			
Operating part mounting position	Single knob	Double knob	Single coarse/fine movement knob	Double coarse/fine movement knob
Feed method	Rack & pinion method			
Travel amount	XY axes ±50 mm, Z axis 50 mm			
Travel amount/1 knob rotation	Approx. 18 mm		Coarse movement: approx. 25.5 mm, Fine movement: approx. 3.3 mm	
Scale	Vernier reading: 0.1 mm			
Sensitivity	0.1 mm			
Travel guide	Dovetail			
Travel accuracy	Straightness: 0.03 mm			
Load capacity	19.6 N (2 kgf)			
Mass	1.7 kg	1.78 kg	1.88 kg	2.05 kg
Main materials/surface treatment	Aluminum alloy/black satin anodized finish			

#### Regular bracket

Model number	TLT-112	TLT-112W	TLT-112S	TLT-112WS
Model name	DT XYZ Stage 40 x 140	DT XYZ Stage 40 x 140 (Double Knob)	DT XYZ Stage 40 x 140 (Coarse/Fine Movement Knob)	DT XYZ Stage 40 x 140 (Double Coarse/Fine Movement Knob)
Travel direction	XYZ-axis triple direction			
Stage surface	40 mm x 140 mm			
Clamp method	Lever method			
Operating part mounting position	Single knob	Double knob	Single coarse/fine movement knob	Double coarse/fine movement knob
Feed method	Rack & pinion method			
Travel amount	±50 mm			
Travel amount/1 knob rotation	Approx. 18 mm		Coarse movement: approx. 25.5 mm, Fine movement: approx. 3.3 mm	
Scale	Vernier reading: 0.1 mm			
Sensitivity	0.1 mm			
Travel guide	Dovetail			
Travel accuracy	Straightness: 0.03 mm			
Load capacity	19.6 N (2 kgf)			
Mass	1.74 kg	1.82 kg	1.92 kg	2.09 kg
Main materials/surface treatment	Aluminum alloy/black satin anodized finish			

