

## Compact XYZ Mechanical Stages



↑ TLT-313



↑ TLT-413



↑ TLT-613

### Features

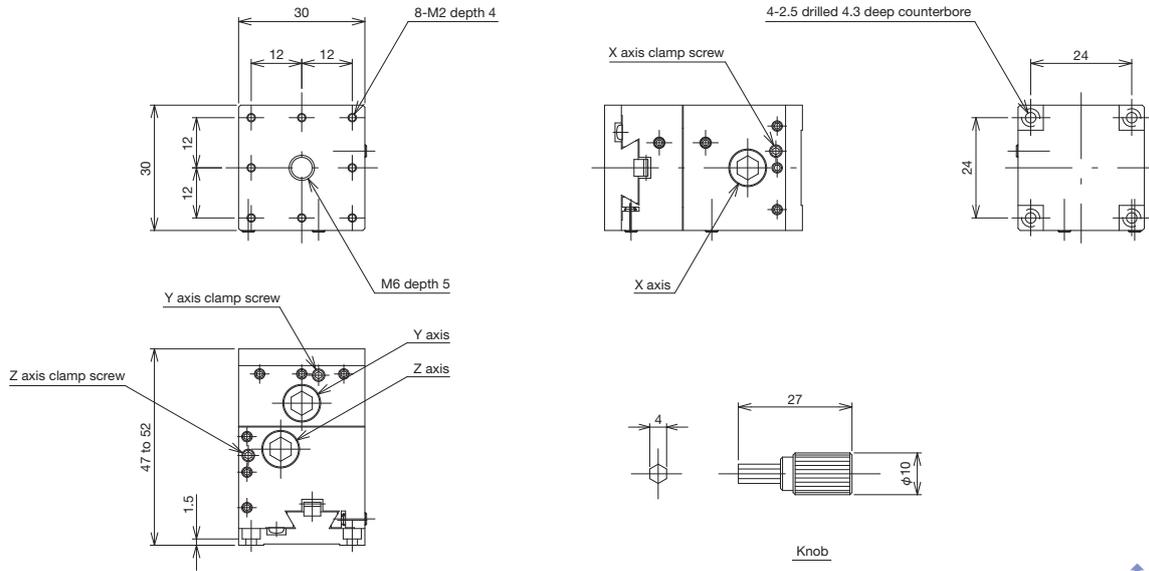
- Block type stage capable of XYZ axis 3-directional travel.
- Knob can be detached to eliminate protrusions from all surfaces. In addition to the supplied knob, commercially available hex wrenches can be used.
- Use a hex wrench to tighten the clamp screw. Ideal for applications where you do not want the stage to move after an adjustment.
- Versatile use for positioning of cameras, sensors, etc.

Model number	TLT-313	TLT-413	TLT-613
Model name	Compact XYZ Mechanical Stage 30 x 30	Compact XYZ Mechanical Stage 40 x 40	Compact XYZ Mechanical Stage 60 x 60
Travel direction	XYZ-axis triple direction		
Stage surface	30 mm x 30 mm	40 mm x 40 mm	60 mm x 60 mm
Clamp method	Hex wrench method		
Operating part mounting position	Separable knob method		
Feed method	Rack & pinion method		
Travel amount	XY axes ±5 mm, Z axis 0 to 5 mm	XY axes ±5 mm, Z axis 0 to 10 mm	XY axes ±10 mm, Z axis 0 to 20 mm
Travel amount/1 knob rotation	Approx. 19.5 mm	Approx. 16 mm	Approx. 19.5 mm
Scale	-		
Sensitivity	0.1 mm		
Travel guide	Dovetail		
Travel accuracy	Straightness: 0.02 mm		Straightness: 0.03 mm
Load capacity	4.9 N (0.5 kgf)		19.6 N (2 kgf)
Mass	0.14 kg	0.25 kg	0.8 kg
Main materials/surface treatment	Aluminum alloy/black satin anodized finish		

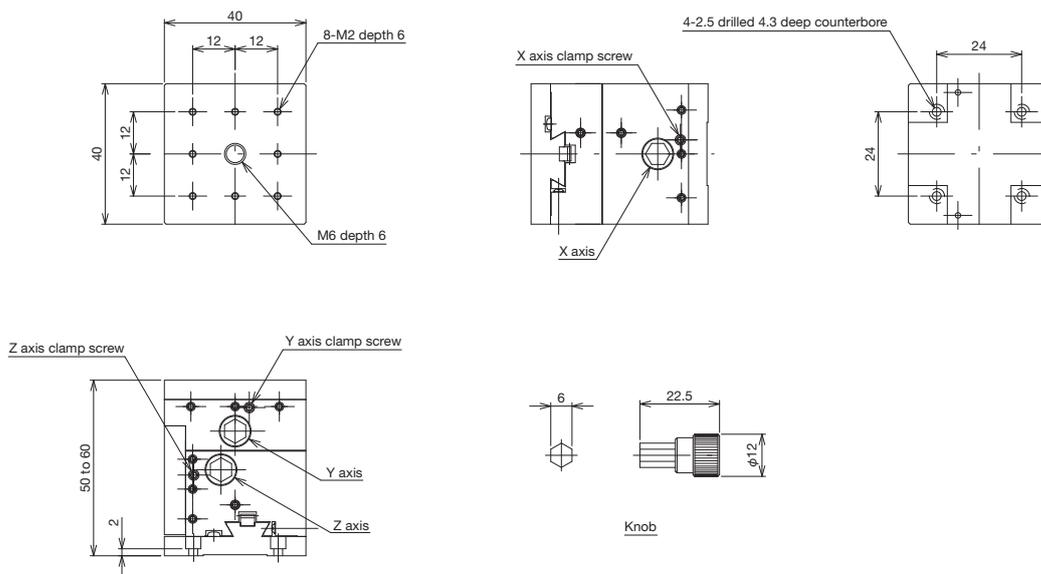


XYZ Stages ◀ Manual Stages ▶

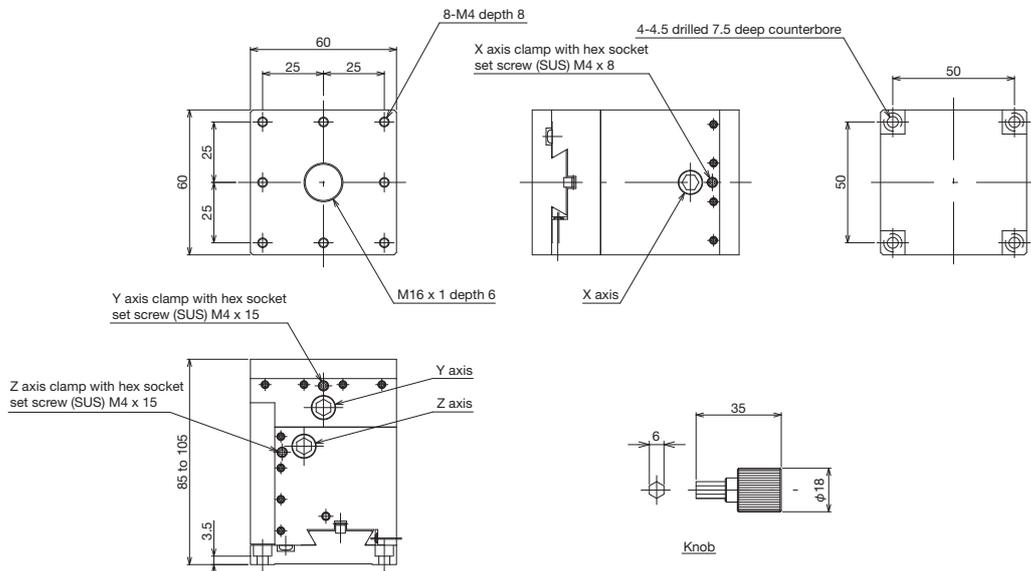
Product Appearance



↑ TLT-313



↑ TLT-413



↑ TLT-613

Motorized Stages	Automated Products for Microscopes
FX Stages	Manual Stages
Thin VIB 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	

# XYZ Mechanical Stands



↑ TLT-212-1CL



↑ TLT-212-2CL



↑ TLT-214-1



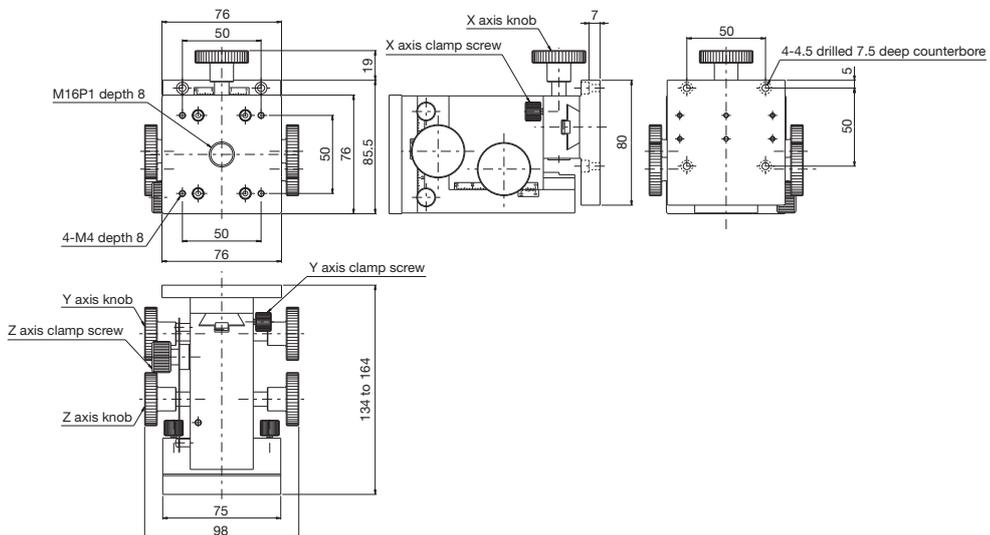
↑ TLT-214-2

## 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 clamp enables fixing in a desired position with strong retention force.

Model number	TLT-212-1CL	TLT-212-2CL	TLT-214-1	TLT-214-2
Model name	XYZ Mechanical Stand 76 x 76 (With Clamp) (Coarse Movement Knob)	XYZ Mechanical Stand 76 x 76 (With Clamp) (Coarse/Fine Movement Knob)	XYZ Mechanical Stand 76 x 76 (With Clamp) (Coarse Movement Knob)	XYZ Mechanical Stand 76 x 76 (With Clamp) (Coarse/Fine Movement Knob)
Travel direction	XYZ-axis triple direction			
Stage surface	76 mm x 76 mm			
Clamp method	XY axis screw method knob, Z axis plate clamp for heavy loads			
Operating part mounting position	X axis coarse movement single knob, YZ axis coarse movement double knob	X axis coarse/fine movement single knob, YZ axis coarse/fine movement double knob	X axis coarse movement single knob, YZ axis coarse movement double knob	X axis coarse/fine movement single knob, YZ axis coarse/fine movement double knob
Feed method	Rack & pinion method			
Travel amount	XY axes ±25 mm, Z axis 0 to 30 mm		XY axes ±25 mm, Z axis 0 to 50 mm	
Travel amount/1 knob rotation	Approx. 18 mm	Coarse movement: approx. 25.5 mm, Fine movement: approx. 3.3 mm	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	49 N (5 kgf)			
Mass	1.6 kg	1.8 kg	2 kg	2.1 kg
Main materials/surface treatment	Aluminum alloy/black satin anodized finish			

## Product Appearance

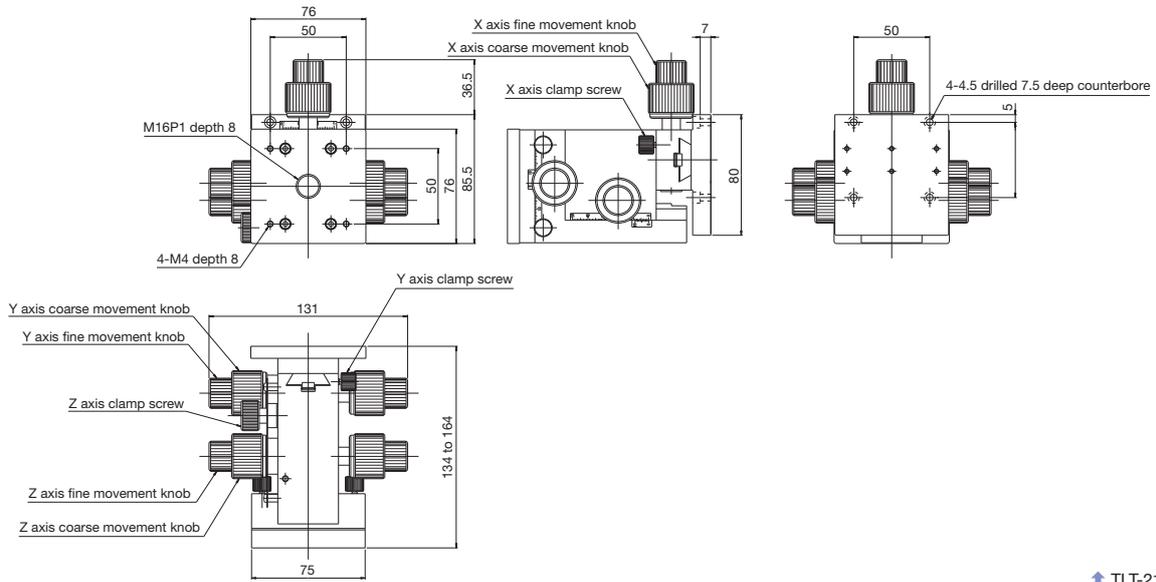


↑ TLT-212-1CL

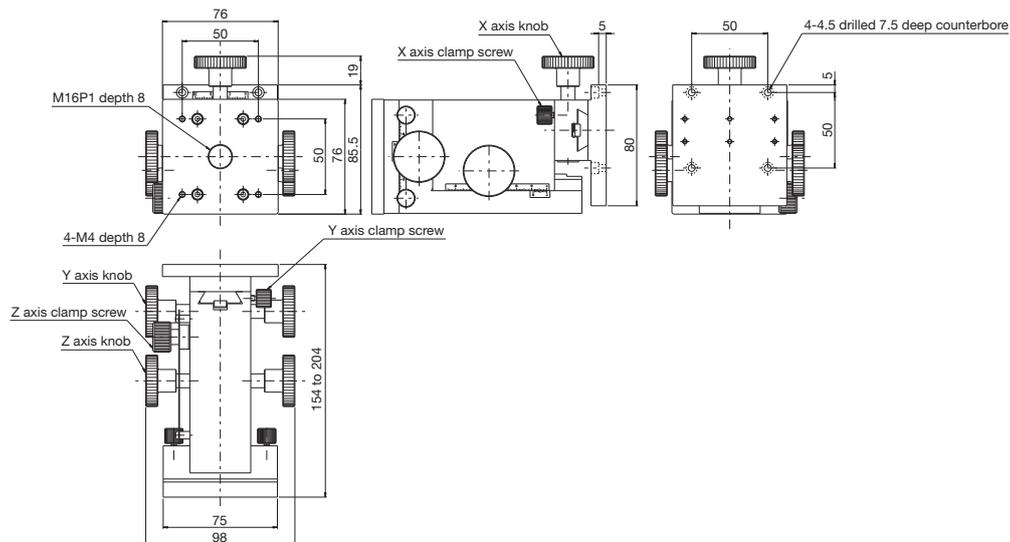


XYZ Stages ◀ Manual Stages ▶

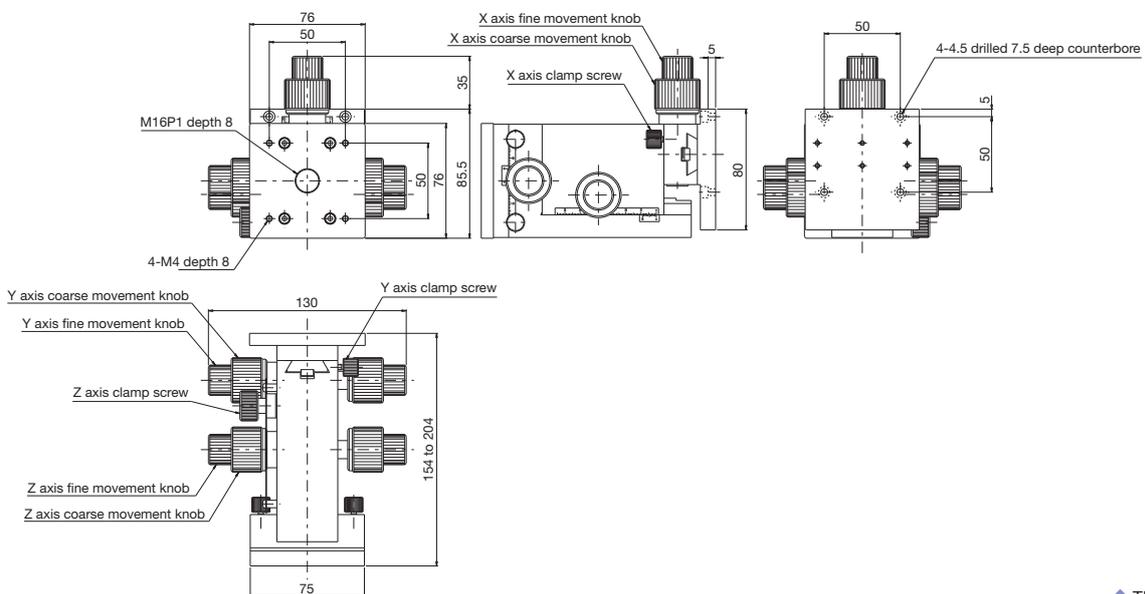
Product Appearance



↑ TLT-212-2CL



↑ TLT-214-1



↑ TLT-214-2

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

## O Type Mechanical Stand (Without Lens Barrel Holder)



↑ TLT-211-1



↑ TLT-211-1CL

### Features

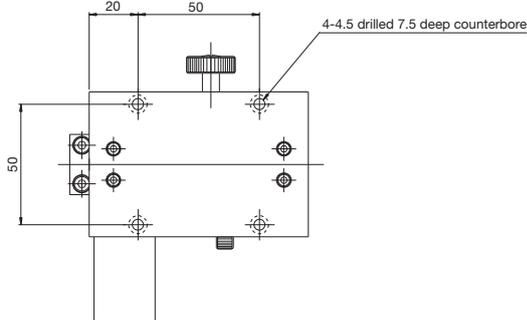
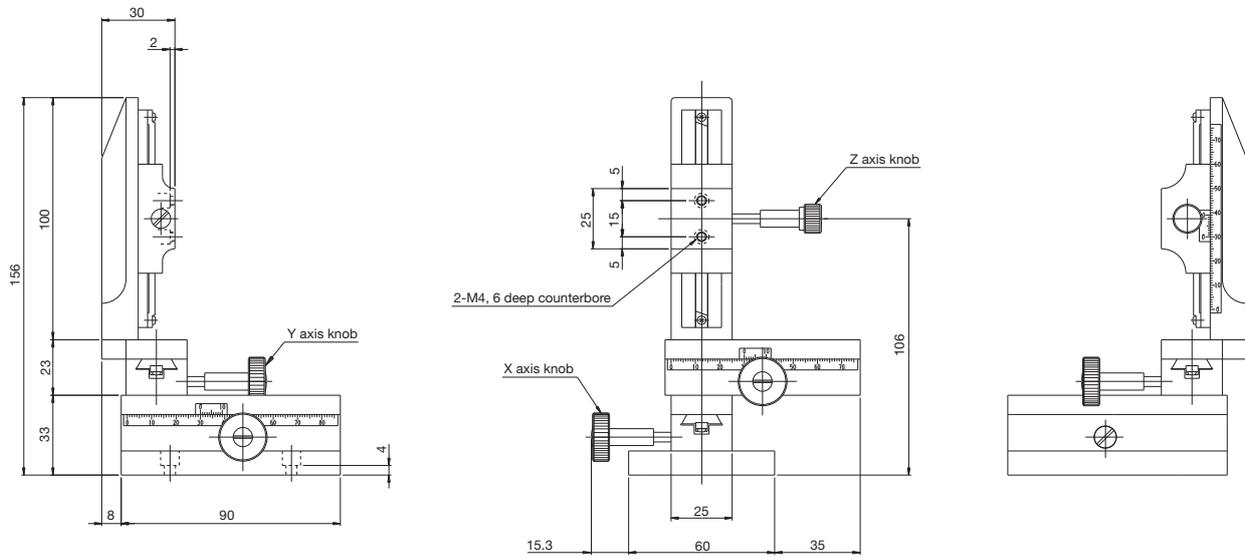
- The travel unit uses a dovetail (D-T Method) for the travel guide.
- A rack & pinion is used for the feed method, achieving large travel amounts.
- Versatile use for positioning of cameras, sensors, etc.
- Without clamp and with clamp types are available.

Model number	TLT-211-1	TLT-211-1CL
Model name	O Type Mechanical Stand (Without Lens Barrel Holder)	O Type Mechanical Stand (Without Lens Barrel Holder) (With Clamp)
Travel direction	XYZ-axis triple direction	
Stage surface	25 mm x 25 mm	
Clamp method	-	Plate clamp
Operating part mounting position	Single knob	
Feed method	Rack & pinion method	
Travel amount	±30 mm	
Travel amount/1 knob rotation	Approx. 18 mm	
Scale	Vernier reading: 0.1 mm	-
Sensitivity	0.1 mm	
Travel guide	Dovetail	
Travel accuracy	Straightness: 0.05 mm	
Load capacity	4.9 N (0.5 kgf)	9.8 N (1 kgf)
Mass	1.3 kg	
Main materials/surface treatment	Brass/chrome, painted	

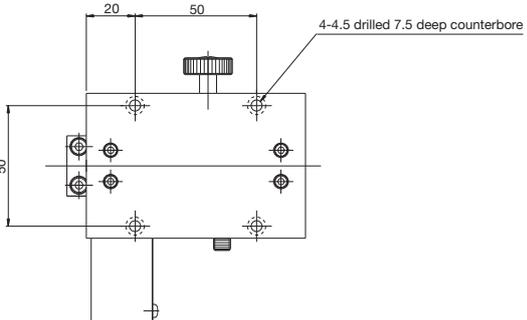
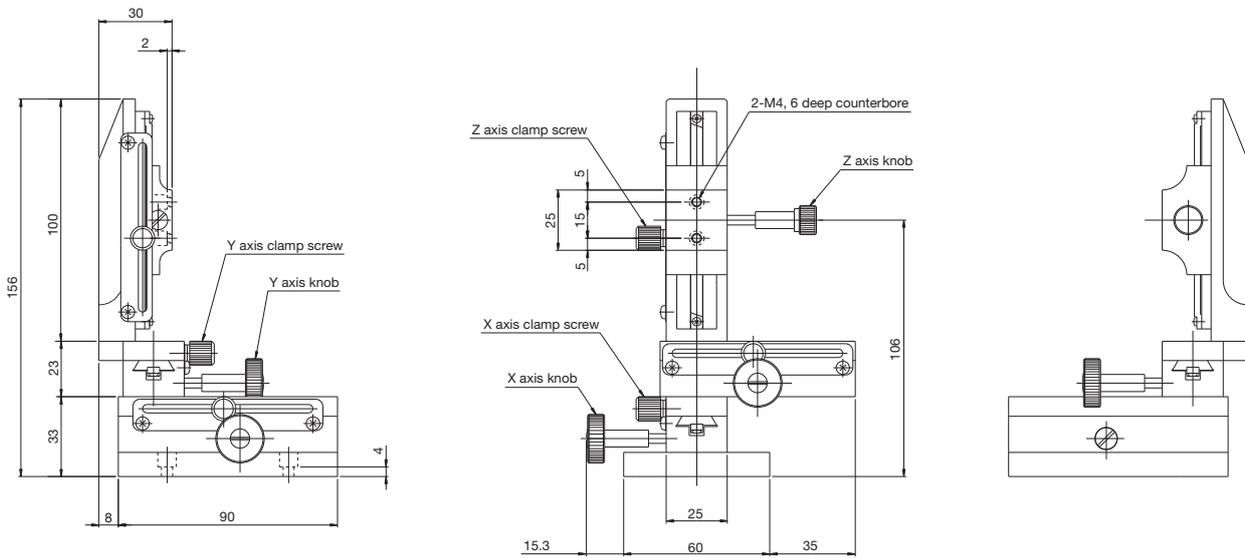


XYZ Stages ◀ Manual Stages ▶

Product Appearance



↑ TLT-211-1



↑ TLT-211-1CL

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