

## Z Stage



↑ TLV-111



↑ TLV-643



↑ TLV-143



↑ TLV-243

### Features

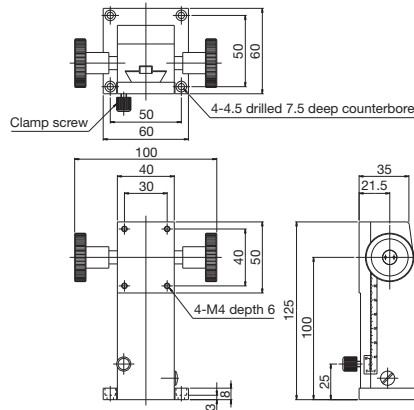
- A Z axis stage that uses a dovetail groove (D-T method) and V-groove and cross rollers (V-CR method) for the travel guides.
- A rack & pinion is used for the feed method, achieving large travel amounts.
- Versatile use for positioning of cameras, sensors, etc.
- TLV-643, 143, and 243 have a lever type clamp that enables fixing in a desired position with strong retention force.
- TLV-643, 143, and 243 are capable of precision positioning, enabling use as a focus unit for microscopes.

Model number	TLV-111	TLV-643	TLV-143	TLV-243
Model name	Long-Distance Z Stage 40 x 50	Precision Z Stage 60 x 60	Long-Distance Precision Z Stage 60 x 115	Long-Distance Precision Z Stage 60 x 155
Travel direction	Z-axis single direction			
Stage surface	40 mm x 50 mm	60 mm x 60 mm	60 mm x 115 mm	60 mm x 155 mm
Clamp method	Knob screw method	Lever method		
Operating part mounting position	Double knob	Double coarse/fine movement knob		
Feed method	Rack & pinion method			
Travel amount	0 to 60 mm	±12.5 mm	±25 mm	±37.5 mm
Travel amount/1 knob rotation	Approx. 18 mm	Coarse movement: 1 rotation approx. 6 mm, Fine movement: 1 rotation approx. 0.68 mm		
Scale	Vernier reading: 0.1 mm	Vernier reading: 0.05 mm		
Sensitivity	0.1 mm	-		
Travel guide	Dovetail	V-groove and cross rollers		
Travel accuracy	Straightness: 0.08 mm	Straightness: 0.005 mm	Straightness: 0.01 mm	Straightness: 0.015 mm
Load capacity	39.2 N (4 kgf)	49 N (5 kgf)	98 N (10 kgf)	
Mass	0.76 kg	0.9 kg	1.6 kg	2.1 kg
Main materials/surface treatment	Aluminum alloy/black satin anodized finish			

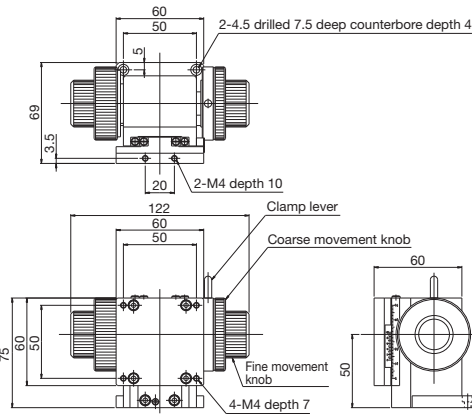


# Z Lift Stages, Z Stages ◀ Manual Stages ◀

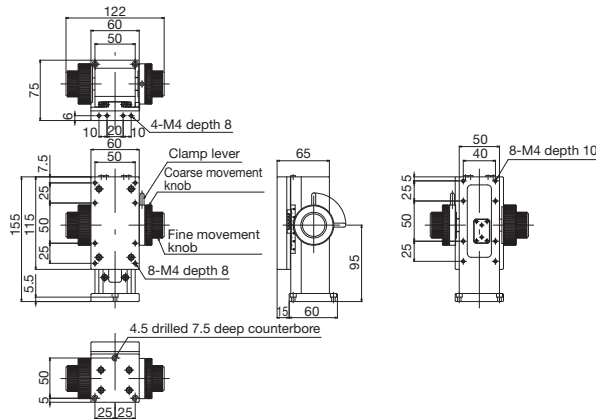
## Product Appearance



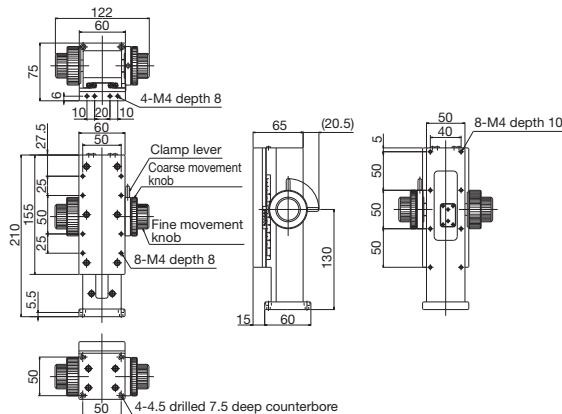
↑ TLV-111



↑ TLV-643



↑ TLV-143



↑ TLV-243

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
Rodary Stages	Tilt Stages	Tilt/Rotary Stages
XZ, YZ Stages	XZ, YZ Stages	XZ Stages