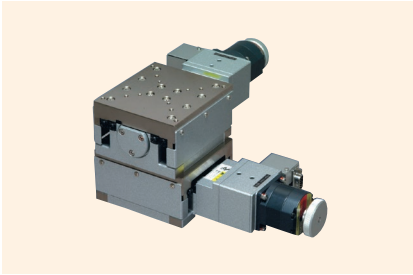


XY Stages - High-Precision/High-Rigidity Type

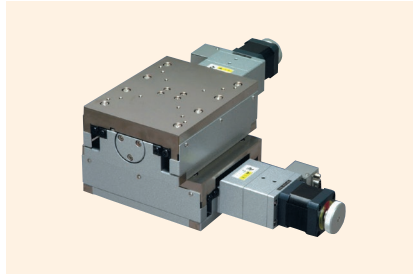
◆ V-CR method

0.75 A/phase

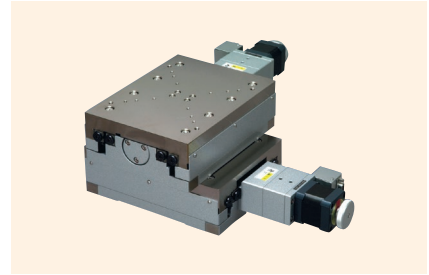
0.75 A/phase motor



↑ TALD-903-H1S



↑ TALD-105-H1S



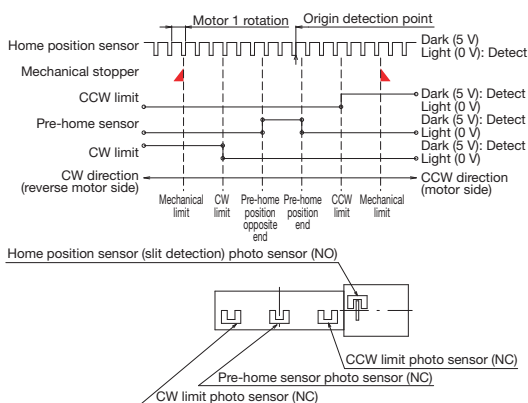
↑ TALD-510-H1S

Features

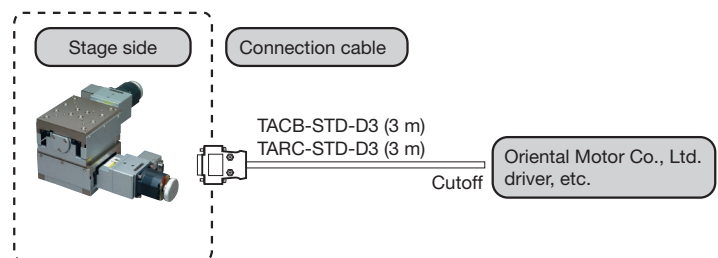
- An ultra-high accuracy motorized XY stage for increased machine accuracy.
- Can be used for applications for automatic positioning of various sensors and workpieces.
- Pre-home sensor and limit sensor positions can be adjusted.

Model number	TALD-903-H1S	TALD-105-H1S	TALD-510-H1S
Model name	XY Stage - High-Precision/High-Rigidity Type		
Travel direction	XY-axis double direction		
Travel amount	±15 mm	±25 mm	±50 mm
Stage surface	90 mm x 100 mm	125 mm x 160 mm	150 mm x 200 mm
Motor used	PK543NBW equivalent (5-wire type pentagonal wiring, 0.75 A/phase)	PK545NBW equivalent (5-wire type pentagonal wiring, 0.75 A/phase)	
Resolution	0.002 mm		
Feed screw specification	Ball screw		
Feed screw lead	1 mm		
Travel guide	V-groove and cross rollers		
Travel accuracy	Straightness (horizontal/vertical): 0.0007 mm	Straightness (horizontal/vertical): 0.0008 mm	Straightness (horizontal/vertical): 0.001 mm
Positioning accuracy	0.002 mm	0.003 mm	0.005 mm
Repeatability	±0.0005 mm		
Lost motion	0.0005 mm		
XY orthogonality	0.006 mm	0.008 mm	0.01 mm
Moment rigidity	Yaw rigidity 0.2 s/N-cm, pitch rigidity 0.15 s/N-cm, roll rigidity 0.15 s/N-cm	Yaw rigidity 0.1 s/N-cm, pitch rigidity 0.08 s/N-cm, roll rigidity 0.08 s/N-cm	Yaw rigidity 0.02 s/N-cm, pitch rigidity 0.02 s/N-cm, roll rigidity 0.02 s/N-cm
Load capacity	157 N (16 kgf)	314 N (32 kgf)	363 N (37 kgf)
Mass	7 kg	16.4 kg	25.6 kg
Maximum speed (at 8,000 pps)	16 mm/s		
Main materials/surface treatment	Steel: Electroless nickel plating (table), coating (base)		
Home position sensor	Normally open contact (make contact, A contact) operation, photo sensor		
Pre-home sensor	Normally closed contact point (break contact, B contact) operation, photo sensor		
Limit sensor	Normally closed contact point (break contact, B contact) operation, photo sensor		
Applicable cables	TACB-STD-D3, TARC-STD-D3		

◆ Sensor operating logic and timing chart



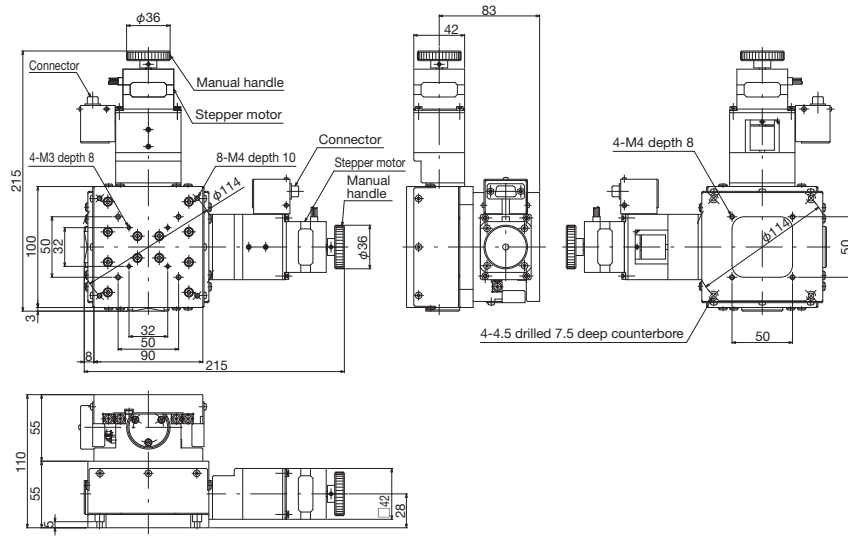
◆ Connection method: Connection cable and driver



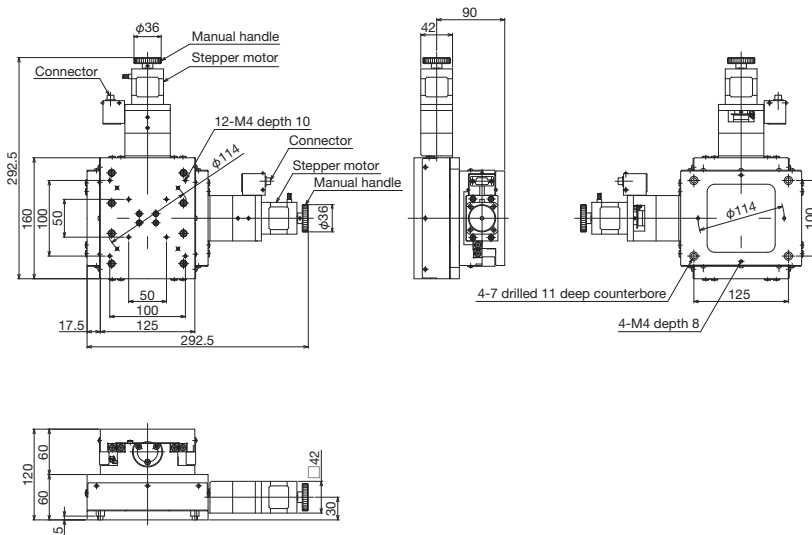


High-Precision/High-Rigidity Stages ◀ Motorized Stages ◀

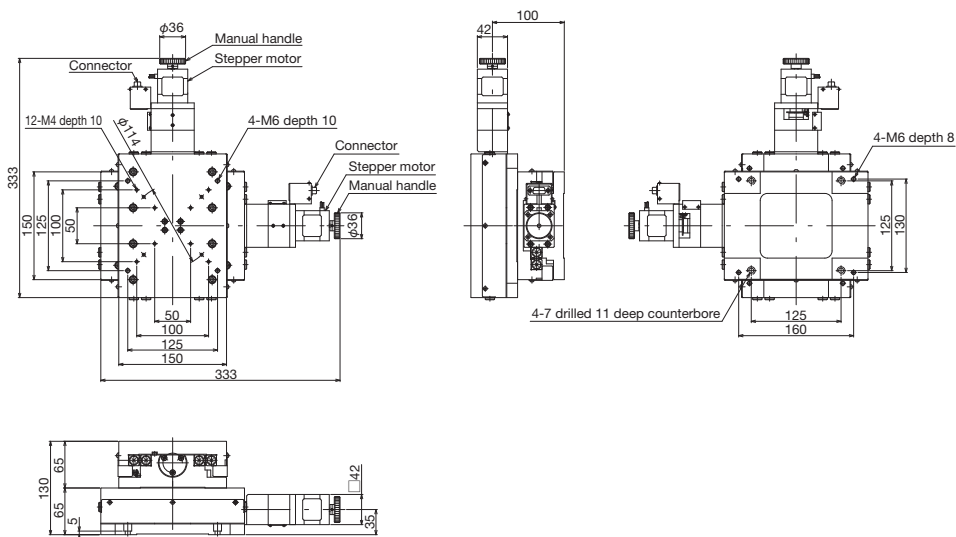
Product Appearance



↑ TALD-903-H1S



↑ TALD-105-H1S



↑ TALD-510-H1S

Motorized Stages	Automated Products for Microscopes
Manual Stages	High-Grade Stages
	30 mm x 30 mm (ø30 mm) Corner Stages
	Class Roller Stages
	Ball Bushing Stages
	High-Precision/High-Rigidity Stages
	Z-Lift Stages
	Tilt Stages
	Connection Cases
	Actuators