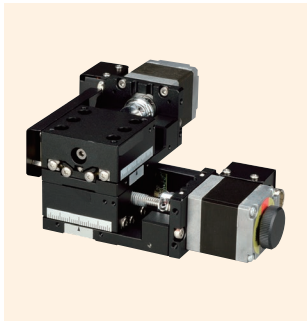
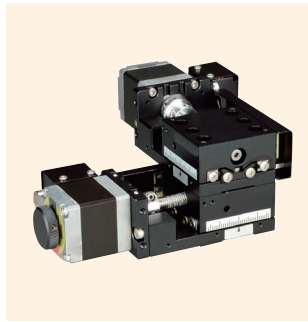


# High-Grade XY Stage 40 x 40, 50 x 50

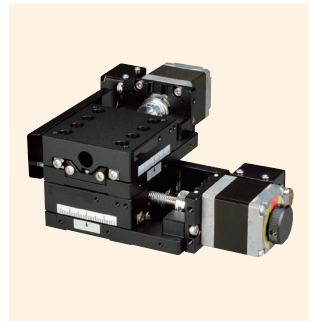
HG-VCR method **0.75 A/phase** 0.75 A/phase motor



↑ TALD-4011-G1M



↑ TALD-4011-G1M-R



↑ TALD-5012-G1M



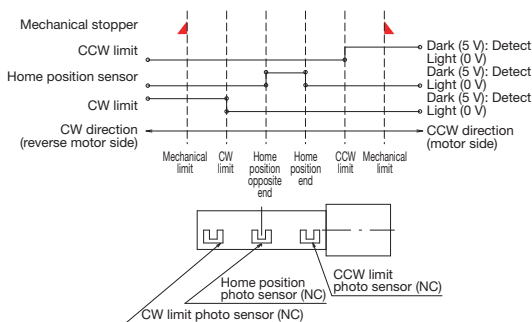
↑ TALD-5012-G1M-R

## Features

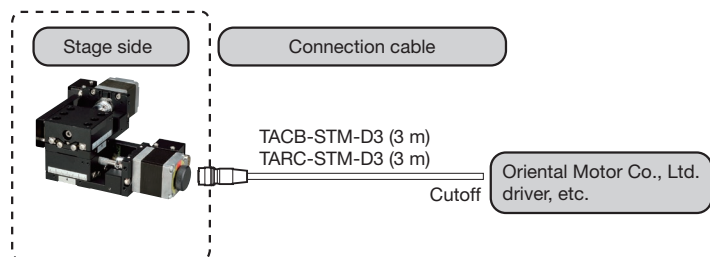
- A high-precision, high-rigidity motorized stage using the HG-VCR method.
- Precision screw and ball screw specifications are available.
- Versatile use for precision positioning of cameras, sensors, workpieces, and more.

Model number (standard)	TALD-4011-G0M	TALD-4011-G1M	TALD-5012-G0M	TALD-5012-G1M
Model number (symmetrical)	TALD-4011-G0M-R	TALD-4011-G1M-R	TALD-5012-G0M-R	TALD-5012-G1M-R
Model name	High-Grade XY Stage			
Travel direction	XY-axis double direction			
Travel amount	±7.5 mm		±10 mm	
Stage surface	40 mm x 40 mm		50 mm x 50 mm	
Motor used	PK523HPB equivalent (5-wire type pentagonal wiring, 0.75 A/phase)			
Resolution	0.001 mm	0.002 mm	0.001 mm	0.002 mm
Feed screw specification	Precision screw	Ball screw	Precision screw	Ball screw
Feed screw lead	0.5 mm	1 mm	0.5 mm	1 mm
Travel guide	HG-VCR (V-groove and cross rollers)			
Travel accuracy	Straightness (horizontal/vertical): 0.002 mm			
Positioning accuracy	Yawing 20 s, pitching 30 s	Yawing 15 s, pitching 25 s	Yawing 20 s, pitching 30 s	Yawing 15 s, pitching 25 s
Repeatability	±0.0005 mm	±0.0003 mm	±0.0005 mm	±0.0003 mm
Lost motion	0.005 mm	0.001 mm	0.005 mm	0.001 mm
Parallelism of motion	0.04 mm	0.03 mm	0.03 mm	0.02 mm
XY orthogonality	0.006 mm			
Moment rigidity	Yaw rigidity 0.5 s/N-cm, pitch rigidity 0.6 s/N-cm, roll rigidity 0.6 s/N-cm		Yaw rigidity 0.3 s/N-cm, pitch rigidity 0.4 s/N-cm, roll rigidity 0.4 s/N-cm	
Load capacity	39.2 N (4 kgf)			
Mass	0.64 kg		0.8 kg	
Maximum speed (at 8,000 pps)	8 mm/s	16 mm/s	8 mm/s	16 mm/s
Main materials/surface treatment	Aluminum alloy/black satin anodized finish			
Home position 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-STM-D3, TARC-STM-D3			

### ◆ Sensor operating logic and timing chart



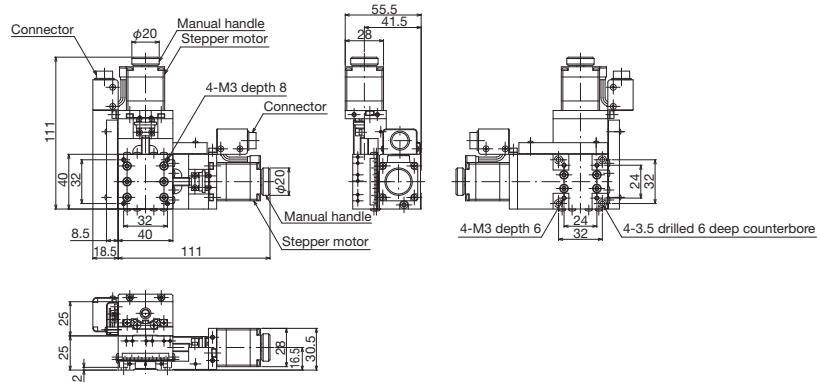
### ◆ Connection method: Connection cable and driver



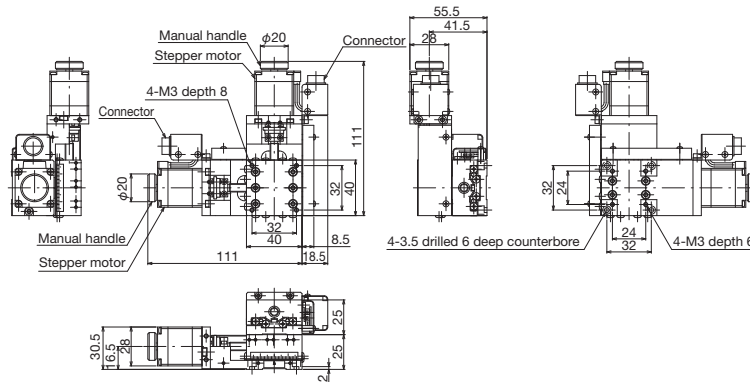


# High-Grade Stages ◀ Motorized Stages ◀

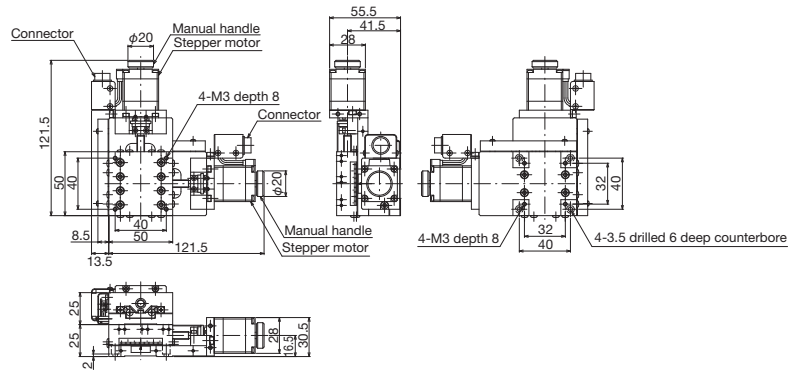
## Product Appearance



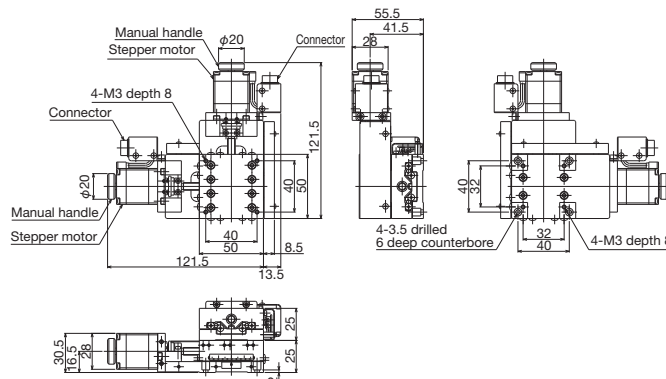
\*TALD-4011-G0M has the same dimensions as TALD-4011-G1M. [↑ TALD-4011-G1M](#)



\*TALD-4011-G0M-R has the same dimensions as TALD-4011-G1M-R. [↑ TALD-4011-G1M-R](#)



\*TALD-5012-G0M has the same dimensions as TALD-5012-G1M. [↑ TALD-5012-G1M](#)



\*TALD-5012-G0M-R has the same dimensions as TALD-5012-G1M-R. [↑ TALD-5012-G1M-R](#)

Motorized Stages	Automated Products for Microscopes	Manual Stages	High-Grade Stages (φ30 mm) Coarse Stages	30 mm x 30 mm Coarse Stages	Coarse Roller Stages	Ball Bushing Stages	High-Precision High-Rigidity Stages	Z-Lift Stages	TTR Stages	Connection Cases	Actuators
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# High-Grade XY Stage 60 x 60, 70 x 70



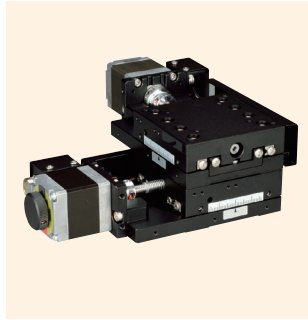
HG-VCR method

0.75 A/phase

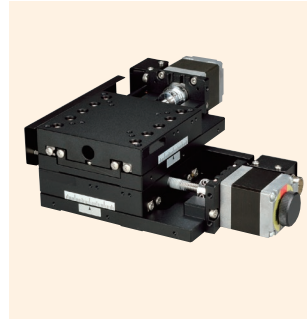
0.75 A/phase motor



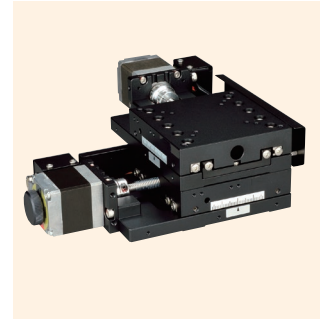
↑ TALD-6012-G1M



↑ TALD-6012-G1M-R



↑ TALD-7013-G1M



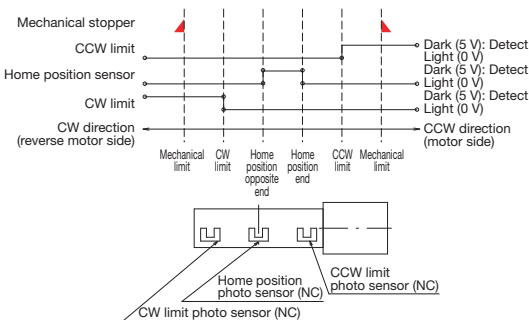
↑ TALD-7013-G1M-R

## Features

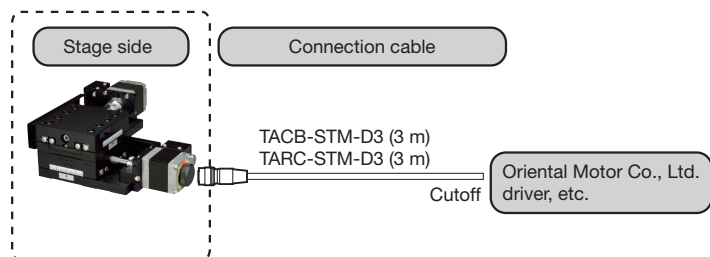
- A high-precision, high-rigidity motorized stage using the HG-VCR method.
- Precision screw and ball screw specifications are available.
- Versatile use for precision positioning of cameras, sensors, workpieces, and more.

Model number (standard)	TALD-6012-G0M	TALD-6012-G1M	TALD-7013-G0M	TALD-7013-G1M
Model number (symmetrical)	TALD-6012-G0M-R	TALD-6012-G1M-R	TALD-7013-G0M-R	TALD-7013-G1M-R
Model name	High-Grade XY Stage			
Travel direction	XY-axis double direction			
Travel amount	±12.5 mm		±15 mm	
Stage surface	60 mm x 60 mm		70 mm x 70 mm	
Motor used	PK523HPB equivalent (5-wire type pentagonal wiring, 0.75 A/phase)			
Resolution	0.001 mm	0.002 mm	0.001 mm	0.002 mm
Feed screw specification	Precision screw	Ball screw	Precision screw	Ball screw
Feed screw lead	0.5 mm	1 mm	0.5 mm	1 mm
Travel guide	HG-VCR (V-groove and cross rollers)			
Travel accuracy	Straightness (horizontal/vertical): 0.002 mm			
Positioning accuracy	Yawing 20 s, pitching 30 s	Yawing 15 s, pitching 25 s	Yawing 20 s, pitching 30 s	Yawing 15 s, pitching 25 s
Repeatability	±0.0005 mm	±0.0003 mm	±0.0005 mm	±0.0003 mm
Lost motion	0.005 mm	0.001 mm	0.005 mm	0.001 mm
Parallelism of motion	0.03 mm	0.02 mm	0.03 mm	0.02 mm
XY orthogonality	0.006 mm			
Moment rigidity	Yaw rigidity 0.2 s/N-cm, pitch rigidity 0.2 s/N-cm, roll rigidity 0.2 s/N-cm		Yaw rigidity 0.12 s/N-cm, pitch rigidity 0.16 s/N-cm, roll rigidity 0.16 s/N-cm	
Load capacity	39.2 N (4 kgf)			
Mass	1.0 kg		1.2 kg	
Maximum speed (at 8,000 pps)	8 mm/s	16 mm/s	8 mm/s	16 mm/s
Main materials/surface treatment	Aluminum alloy/black satin anodized finish			
Home position 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-STM-D3, TARC-STM-D3			

### ◆ Sensor operating logic and timing chart



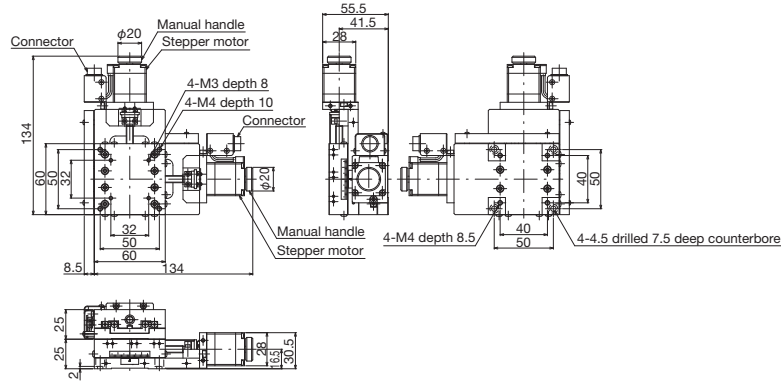
### ◆ Connection method: Connection cable and driver



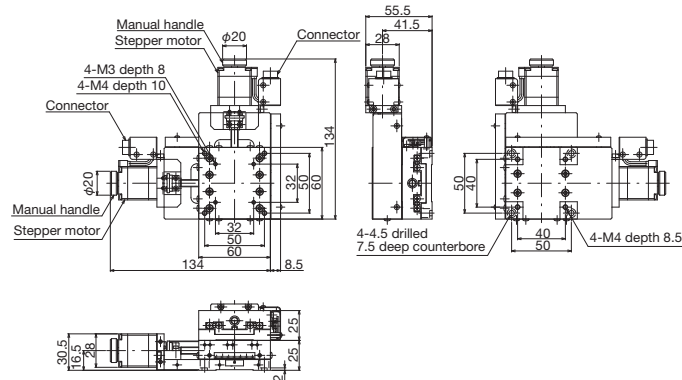


# High-Grade Stages ◀ Motorized Stages ◀

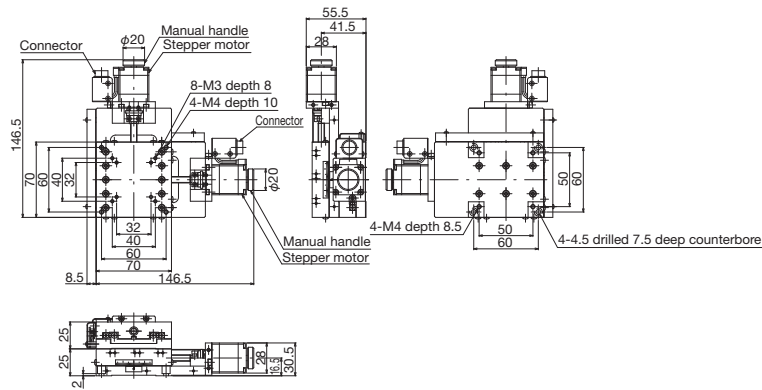
## Product Appearance



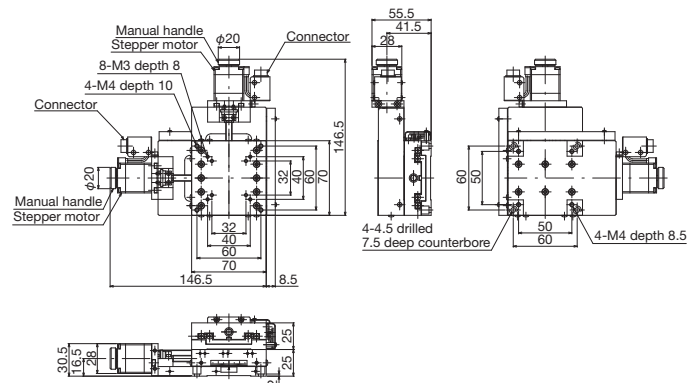
\*TALD-6012-G0M has the same dimensions as TALD-6012-G1M. [↑ TALD-6012-G1M](#)



\*TALD-6012-G0M-R has the same dimensions as TALD-6012-G1M-R. [↑ TALD-6012-G1M-R](#)



\*TALD-7013-G0M has the same dimensions as TALD-7013-G1M. [↑ TALD-7013-G1M](#)



\*TALD-7013-G0M-R has the same dimensions as TALD-7013-G1M-R. [↑ TALD-7013-G1M-R](#)

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