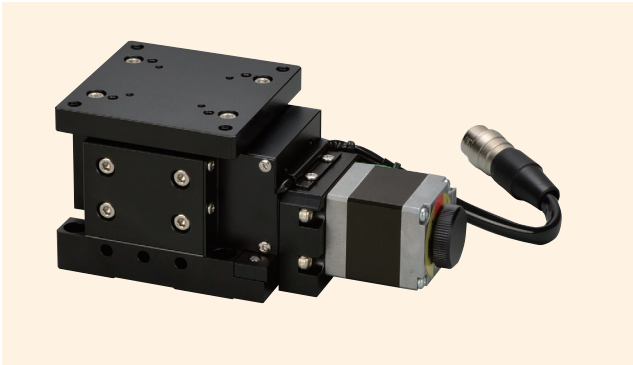


Z Lift Stages

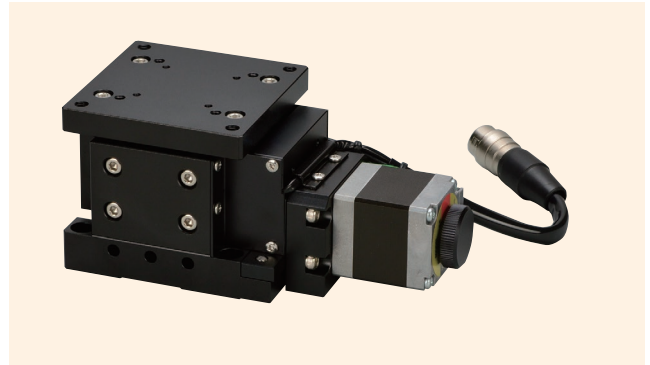
◆ V-CR method

0.75 A/phase

0.75 A/phase motor



↑ TALV-600C-H0M



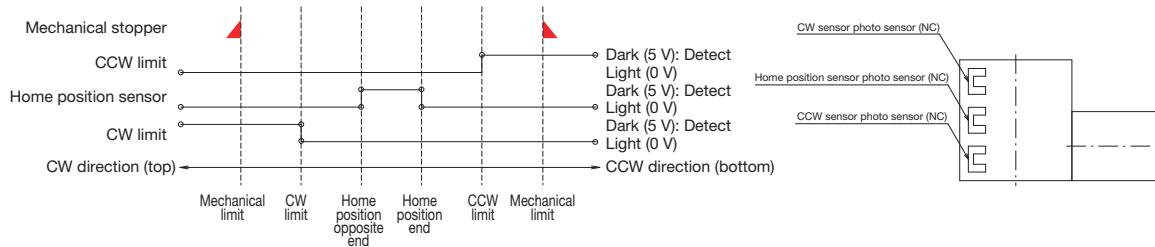
↑ TALV-600C-H1M

Features

- Z lift stages that adopt a V-groove and cross roller guide for high precision.
- The feed screw is available as a precision screw or ball screw.
- Versatile use for precision positioning of cameras, sensors, workpieces, and more.

| Model number | TALV-600C-H0M | TALV-600C-H1M |
|----------------------------------|--|---------------------------------------|
| Model name | Z Lift Stage precision screw specification | Z Lift Stage ball screw specification |
| Travel direction | Z-axis single direction | |
| Travel amount | 0 to 5 mm | |
| Stage surface | 60 mm x 60 mm | |
| Motor used | PK523HPB equivalent (5-wire type pentagonal wiring, 0.75 A/phase) | |
| Resolution | 0.0005 mm | 0.001 mm |
| Feed screw lead | 0.5 mm | 1 mm |
| Travel guide | V-groove and cross rollers | |
| Travel accuracy | Straightness (horizontal/vertical): 0.005 mm | |
| Positioning accuracy | 0.012 mm | 0.01 mm |
| Repeatability | ±0.0015 mm | ±0.001 mm |
| Lost motion | 0.003 mm | |
| Load capacity | 29.4 N (3 kgf) | |
| Mass | 0.7 kg | |
| Maximum speed (at 5,000 pps) | 2.5 mm/s | 5 mm/s |
| Main materials/surface treatment | Aluminum alloy/black satin anodized finish | |
| Home position sensor | Normally closed contact (break contact, B contact) operation, photo sensor | |
| Pre-home sensor | - | |
| Limit sensor | Normally closed contact (break contact, B contact) operation, photo sensor | |
| Applicable cables | TACB-BTM-D3, TARC-BTM-D3 | |
| RoHS directive compliance status | RoHS2 Regulation 10 substances do not contain | |

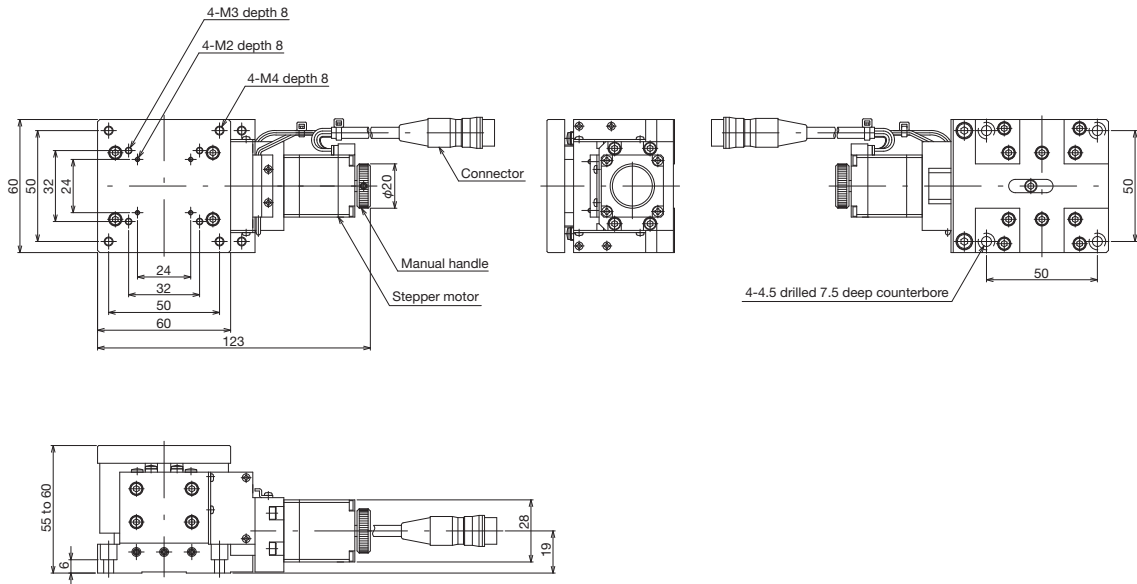
◆ Sensor operating logic and timing chart



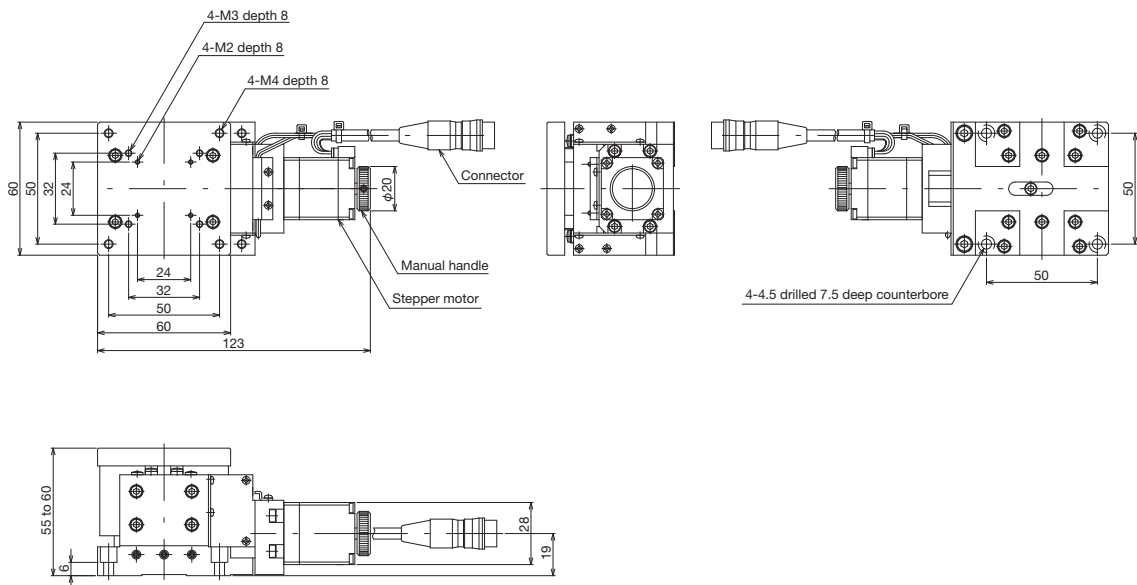


Z Lift Stages ◀ Motorized Stages ◀

Product Appearance

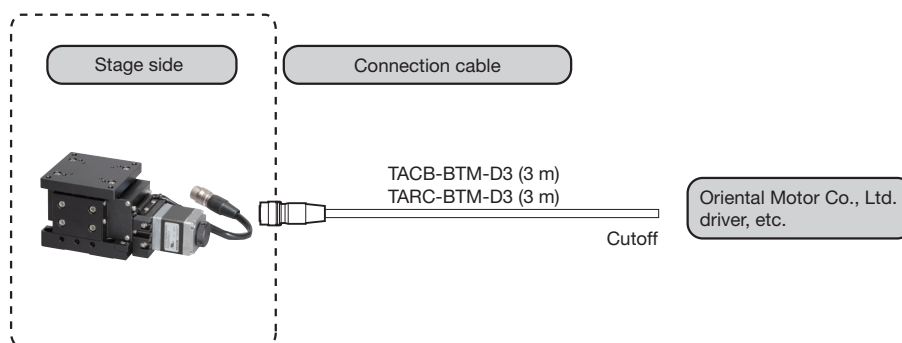


↑ TALV-600C-H0M



↑ TALV-600C-H1M

◆ Connection method: Connection cable and driver



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

Z Lift Stages

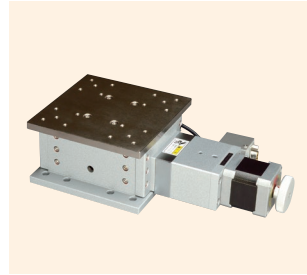
V-CR method **0.75 A/phase** 0.75 A/phase motor



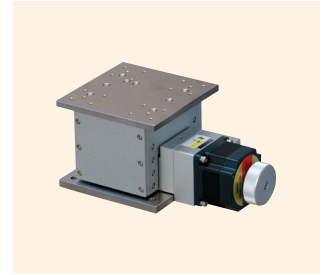
↑ TALV-901-HP



↑ TALV-902-HP



↑ TALV-102-HP



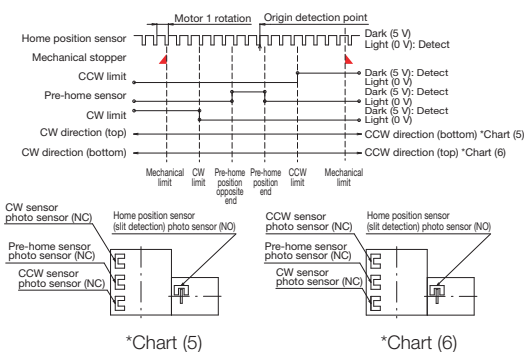
↑ TALV-104-HP

Features

- Z lift stages that adopt a V-groove and cross roller guide for high precision.
- Types with stage surface sizes of 90 mm x 90 mm and 125 mm x 125 mm are available, each with different travel amounts.
- Versatile use for precision positioning of cameras, sensors, workpieces, and more.

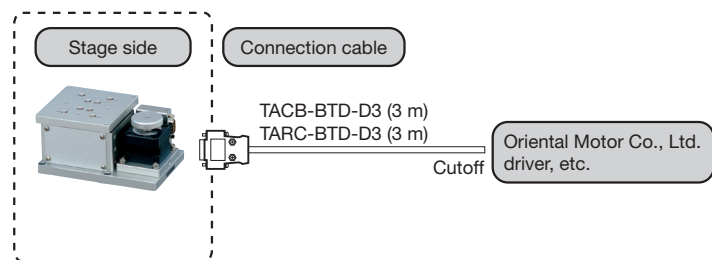
| Model number | TALV-901-HP | TALV-902-HP | TALV-102-HP | TALV-104-HP |
|----------------------------------|---|---|---|---|
| Model name | Z Lift Stage | | | |
| Travel direction | Z-axis single direction | | | |
| Travel amount | 0 to 10 mm | 0 to 20 mm | | 0 to 40 mm |
| Stage surface | 90 mm x 90 mm | | 125 mm x 125 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) | PKP564FN equivalent (5-wire type pentagonal wiring, 0.75 A/phase) |
| Resolution | 0.001 mm | | | |
| Feed screw lead | 1 mm | | | - |
| Travel guide | V-groove and cross rollers | | | |
| Travel accuracy | Straightness (horizontal/vertical): 0.005 mm | | | Straightness (horizontal/vertical): 0.008 mm |
| Positioning accuracy | 0.008 mm | 0.01 mm | | 0.03 mm |
| Repeatability | ±0.0008 mm | | | ±0.001 mm |
| Lost motion | 0.001 mm | | | 0.002 mm |
| Parallelism | 0.08 mm | | 0.04 mm | 0.05 mm |
| Moment rigidity | Yaw rigidity 0.5 s/N-cm, pitch rigidity 0.5 s/N-cm, roll rigidity 0.03 s/N-cm | Yaw rigidity 0.6 s/N-cm, pitch rigidity 0.6 s/N-cm, roll rigidity 0.05 s/N-cm | Yaw rigidity 1.5 s/N-cm, pitch rigidity 1.5 s/N-cm, roll rigidity 0.05 s/N-cm | Yaw rigidity 1 s/N-cm, pitch rigidity 1 s/N-cm, roll rigidity 0.05 s/N-cm |
| Load capacity | 49 N (5 kg) | | 98 N (10 kgf) | |
| Mass | 1.8 kg | 1.9 kg | 5.5 kg | 5.9 kg |
| Maximum speed (at 5,000 pps) | 5 mm/s | | | |
| Main materials/surface treatment | Aluminum alloy/white satin anodized finish | | Steel: Electroless nickel plating, coating | |
| 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-BTD-D3, TARC-BTD-D3 | | | |
| RoHS directive compliance status | RoHS2 Regulation 10 substances do not contain | | | |

◆ Sensor operating logic and timing chart



*Chart (5) TALV-102-HP
*Chart (6) TALV-901-HP, TALV-902-HP, TALV-104-HP

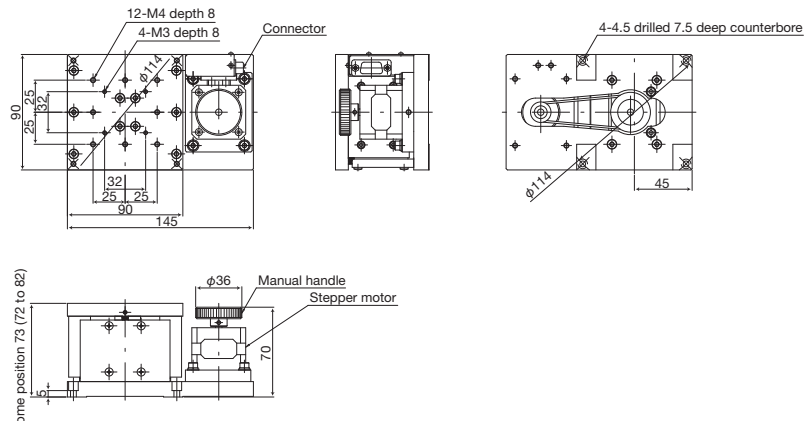
◆ Connection method: Connection cable and driver



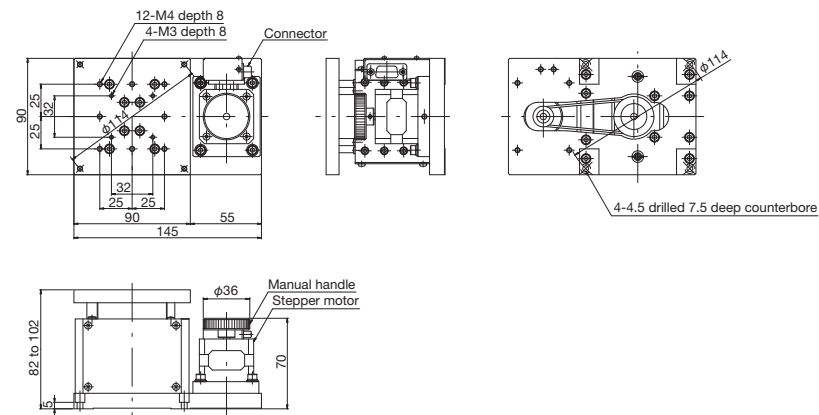


Z Lift Stages ◀ Motorized Stages ◀

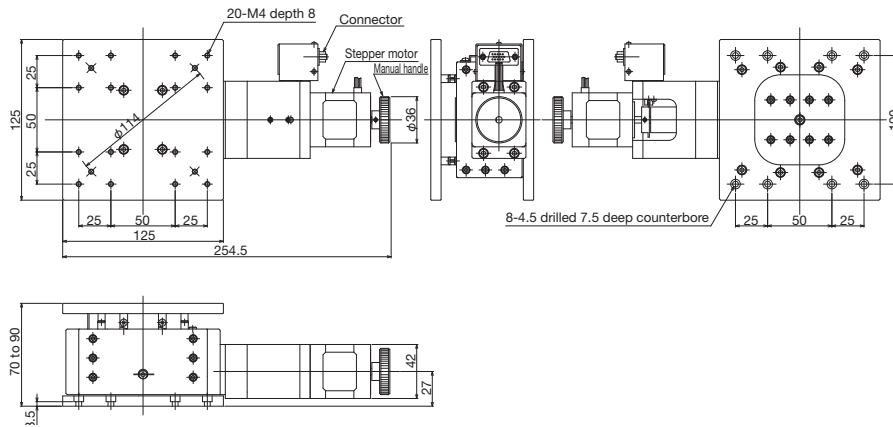
Product Appearance



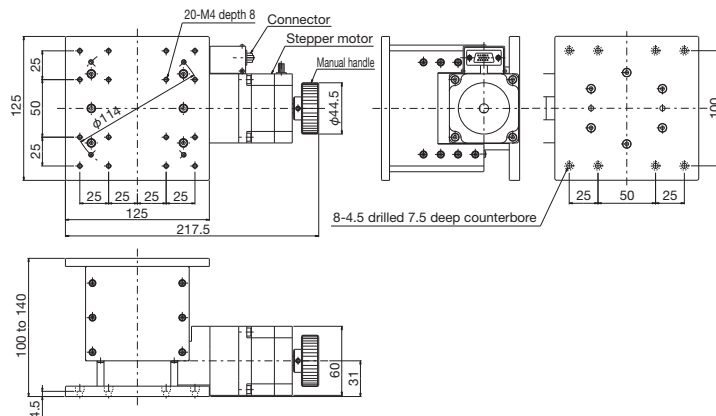
TALV-901-HP



TALV-902-HP



TALV-102-HP



TALV-104-HP

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