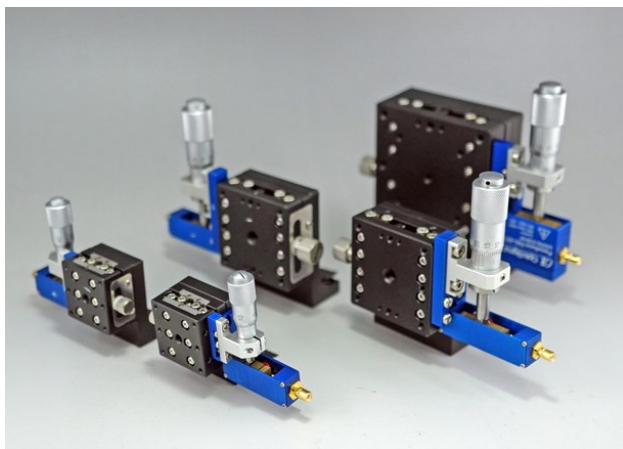


TADC-3LPA

RoHS

Z-axis stage with Z bracket that allows fine adjustment of 20nm or less by adding a piezo assist mechanism to the manual stage. Ideal for manual stage units and systems that require high resolution position adjustment. Stage sizes 25x25, 40x40, 60x60mm are available.

- A dedicated controller for the piezo assist stage easily perform fine adjustment without any setting. The fine adjustment of the dial type knob can be used without resistance even in combination with a micrometer head.



Guide

► Use the piezo assist controller (PASC) to adjust the fine movement mechanism. A piezo assist controller connection cable (2m) is included with the piezo assist stage.




Attention

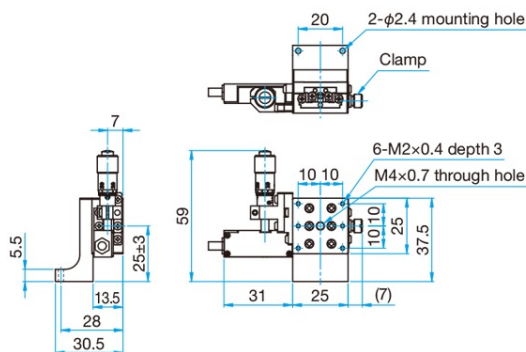
► When installing the stage, be careful not to give a shock to the micrometer bracket. Otherwise, the piezo assist mechanism may be damaged.

- ▶ When the power of the piezo assist dedicated controller (PASC) is turned off, the position adjustment of the piezo assist will be changed, and position for fine adjustment will be shifted.

Outline Drawing (mm)

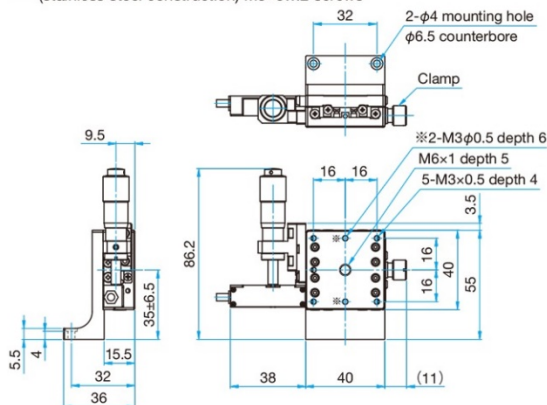
TADC-253LPA

-  Hexagon socket head cap screw
(stainless steel construction) M2x8...2 screws




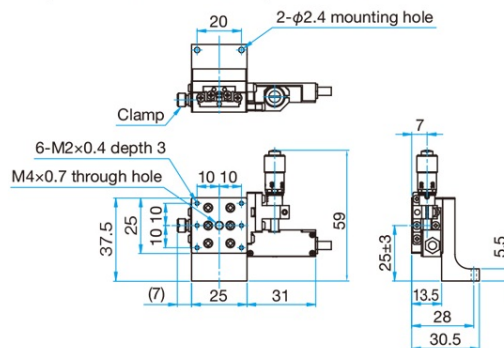
TADC-403LPA

- Hexagon socket head cap screw
(stainless steel construction) M3x8...2 screws



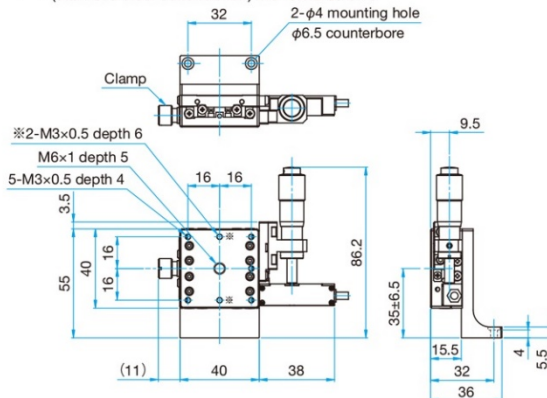
TADC-253RLPA

-  Hexagon socket head cap screw
(stainless steel construction) M2x8...2 screws



TADC-403RLPA

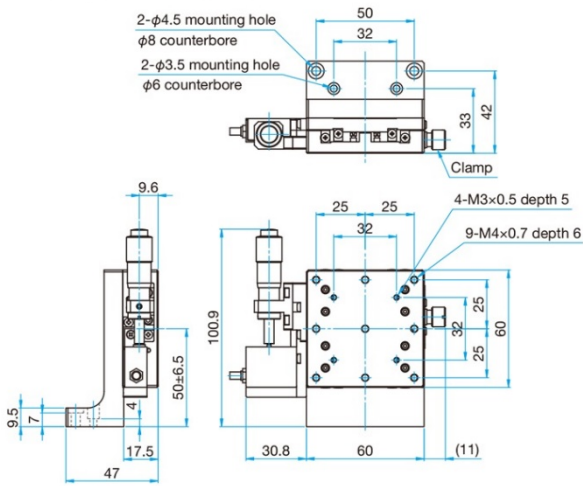
- Hexagon socket head cap screw
(stainless steel construction) M3x8...2 screws
-
- 32 2- $\phi 4$ mounting hole
 $\phi 6.5$ counterbore



Outline Drawing (mm)

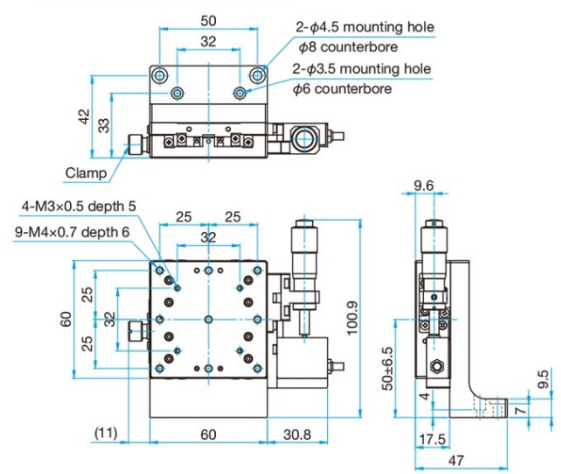
TADC-603LPA

Hexagon socket head cap screw (stainless steel construction)
M3×6...2 screws, M4×12...2 screws



TADC-603RLPA

Hexagon socket head cap screw (stainless steel construction)
M3×8...2 screws, M4×12...2 screws



Specifications

| Part Number | | TADC-253LPA | TADC-403LPA | TADC-603LPA |
|-------------------------------------|-----------------|-------------------------------------|--------------|--------------|
| (Opposite Model) | | TADC-253RLPA | TADC-403RLPA | TADC-603RLPA |
| Stage Size [mm] | | 25 × 25 | 40 × 40 | 60 × 60 |
| Axes of travel | | | Z Axis | |
| Travel of Coarse Drive [mm] | | ±3 | ±6.5 | ±6.5 |
| Travel of Fine Drive [μm] | | >25μm | >30μm | >30μm |
| Micrometer Position | | Side | | |
| Travel/ rotation [mm] | | 0.5 | 0.5 | 0.5 |
| Micrometer Readable Resolution [mm] | | 0.01 | 0.01 | 0.01 |
| Piezo resolution | | <20nm | <20nm | <20nm |
| Guide Method | | Extended Contact Ball Bearing Guide | | |
| Primary Material | | Aluminum | | |
| Finish | | Black anodized | | |
| Load Capacity [N] | | 9.8(1.0kgf) | 9.8(1.0kgf) | 9.8(1.0kgf) |
| Travel Accuracy / Straightness [μm] | | 3 | 3 | 3 |
| Squareness | | - | - | - |
| Max. Moment | Pitch [N・m] | 1.47 | 2.5 | 4.9 |
| Capacity | Roll [N・m] | 1.47 | 2.5 | 4.9 |
| Moment Stiffness | Pitch [″ /N・cm] | 16 | 0.66 | 0.3 |
| Running Parallelism [μm] | | 20 | 10 | 10 |
| Weight [kg] | | 0.1 | 0.21 | 0.41 |

Controller Dedicated for Piezo Assist Stage

Dedicated controller that drives the piezo assist stage series. Lineup includes 1-axis type and 3-axis type.



- The fine adjustment mechanism of the piezo assist stage is operated by turning the dial knob.

Guide

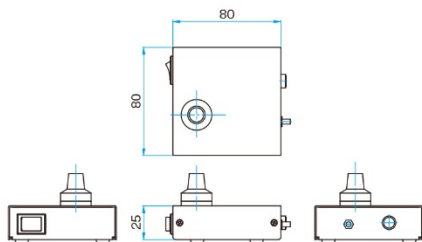
► Two types of AC adapters are available. The basic performance are same, please select according to the required standards.

Attention

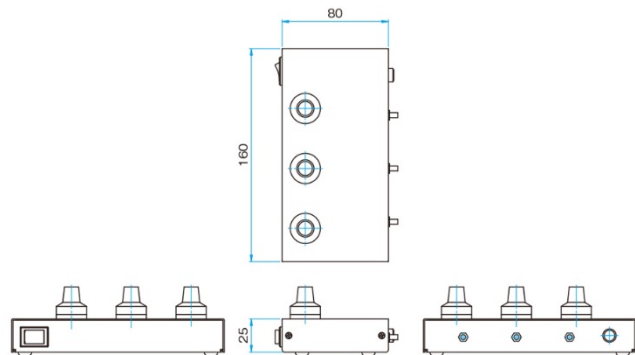
► Applicable size of DC jack is dia.4mm. When preparing the power supply by the customer, pay attention to the plug diameter.

Outline Drawing (mm)

PADC-101



PASC-103



Specifications

| Part Number | PASC-101 | PASC-103 | AC-ADP-0618 | AC-ADP-0620 |
|------------------------------------|-----------------------------------|-----------|-------------|--------------|
| Number of Control Axes | 1 Axis | 3 Axes | — | — |
| Power Voltage | DC6V 0.8A | DC6V 1.8A | DC6V 1.8A | DC6V 2.0A |
| Compatible AC Adapter | AC-ADP-0618/AC-ADP-0620 | | — | — |
| Operating temperature | 5 - 40°C | | — | — |
| Storage Temperature | -20 - 60° C | | — | — |
| Ambient Humidity | 20 - 80%RH (without condensation) | | — | — |
| Dimension (Except projection) [mm] | 80x80x25 | 160x80x25 | 44x26.5x60 | 43.5x40.2x60 |
| DoE Level | — | — | Level IV | Level VI |
| CCC | — | — | — | ○ |
| Weight [kg] | 0.12 | 0.28 | 0.14 | 0.2 |