Z Axis Piezo Assist Stage (Vertical Mounting)

TADC-ZPA

RoHS

Vertical mounting type Z-axis stage 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-251SZPA

Hexagon socket head cap screw (stainless steel construction) M2×4...4 screws

4-\$\phi 2.4\$ mounting hole \$\phi 4\$ counterbore

Clamp

M4×0.7 through hole 6-M2×0.4 depth 3

(7) 25 31

TADC-251SRZPA

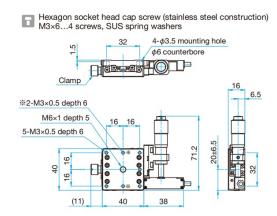
Hexagon socket head cap screw (stainless steel construction) M2×4...4 screws

4-φ2.4 mounting hole φ4 counterbore

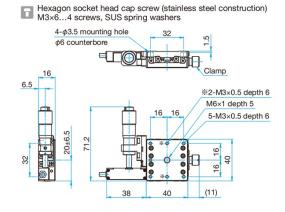
Clamp

M4×0.7 through hole 6-M2×0.4 depth 3

TADC-401SZPA



TADC-401SRZPA

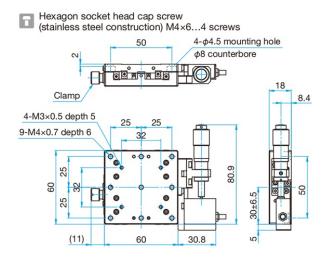


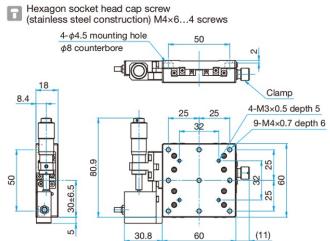


Outline Drawing (mm)

TADC-601SZPA

TADC-601SRZPA





Specifications				
Part Number		TADC-251SZPA	TADC-401SZPA	TADC-601SZPA
(Opposite Model)		TADC-251SRZPA	TADC-401SRZPA	TADC-601SRZPA
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
Giude Method		Extended Contact Ball Bearing Guide		
Primary Material		Aluminum		
Finish		Black anodized		
Load Cpacity [N]		9.8(1.0kgf)	9.8(1.0kgf)	9.8(1.0kgf)
Travel Accuracy / Straightness [μm]		3	3	3
Squareness		-	-	-
Max. Moment Capacity	Pitch [N·m]	1.47	2.5	2.5
	Roll [N•m]	1.47	2.5	2.5
Moment Stiffness	Pitch [" /N•cm]	6	0.66	0.66
Running Parallelism [µm]		20	10	10
Weight [kg]		0.07	0.16	0.25

