

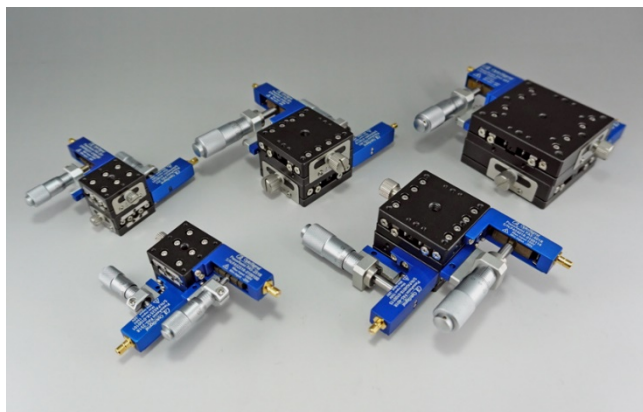
# XY Axis Piezo Assist Stage

# TADC-2PA

RoHS

XY-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.



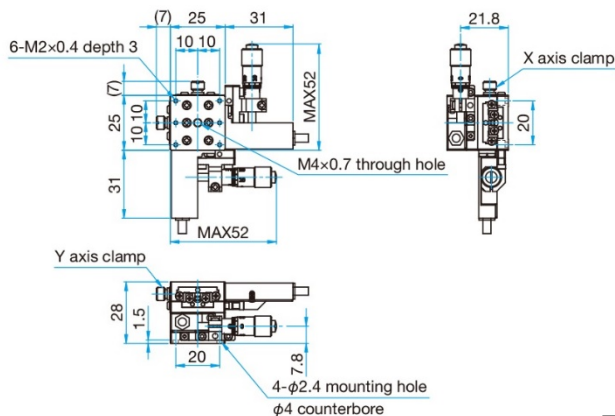
## Attention

- 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)

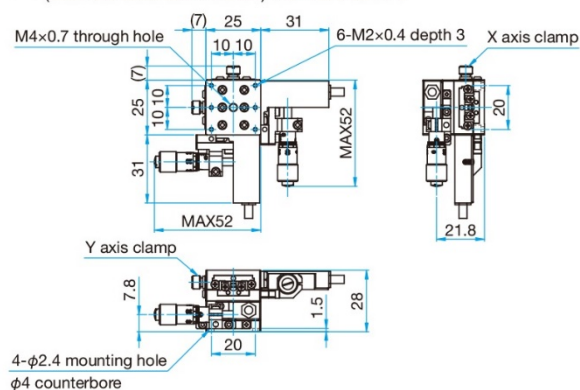
### TADC-252WSPA

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



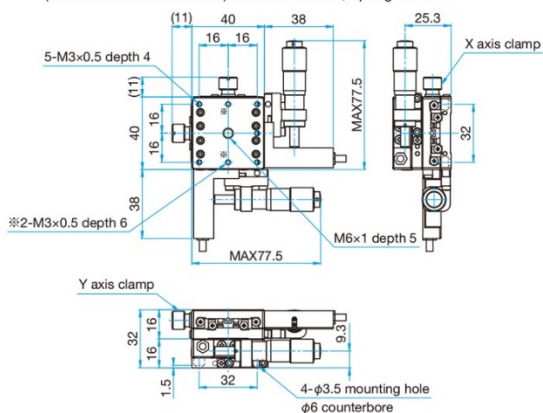
### TADC-252WSRPA

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



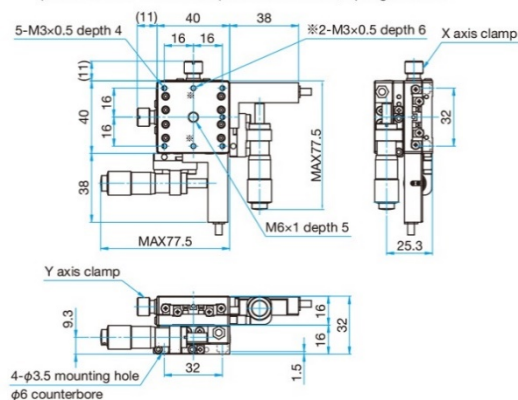
### TADC-402WSPA

- ▣ Hexagon socket head cap screw (stainless steel construction) M3×6...4 screws, Spring washers



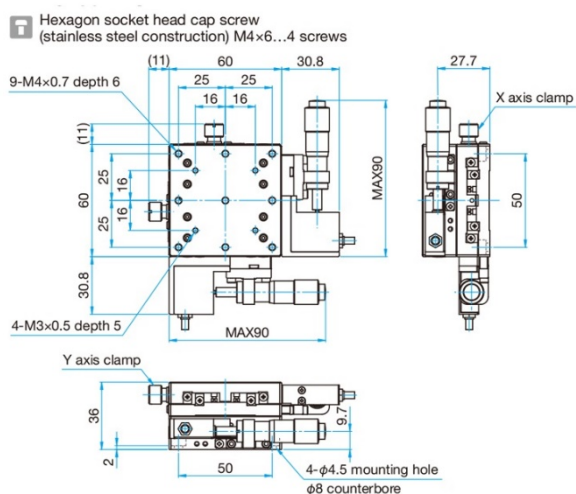
### TADC-402WSRPA

- ▣ Hexagon socket head cap screw (stainless steel construction) M3×6...4 screws, Spring washers

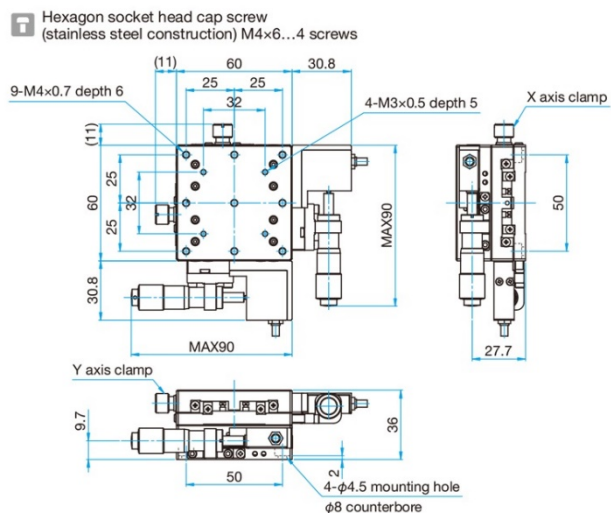


Outline Drawing (mm)

TADC-602WSPA



TADC-602WSRPA



Specifications			
Part Number	TADC-252WSPA	TADC-402WSPA	TADC-602WSPA
(Opposite Model)	TADC-252WSRPA	TADC-402WSRPA	TADC-602WSRPA
Stage Size [mm]	25 × 25	40 × 40	60 × 60
Axes of travel		XY 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]	39.2(4.0kgf)	49(5kgf)	49(5kgf)
Travel Accuracy / Straightness [μm]	3	3	3
Max. Moment Capacity	Pitch [N·m]	1.9	2.5
	Roll [N·m]	1.9	2.5
	Yaw [N·m]	1.9	2.5
Moment Stiffness	Pitch ["/N·cm]	4.5	1.22
	Roll ["/N·cm]	4.5	1.22
Parallelism [μm]	60	50	50
Orthogonality [μm]	10	10	10
Running Parallelism [μm]	20	20	20
Weight [kg]	0.14	0.32	0.5