

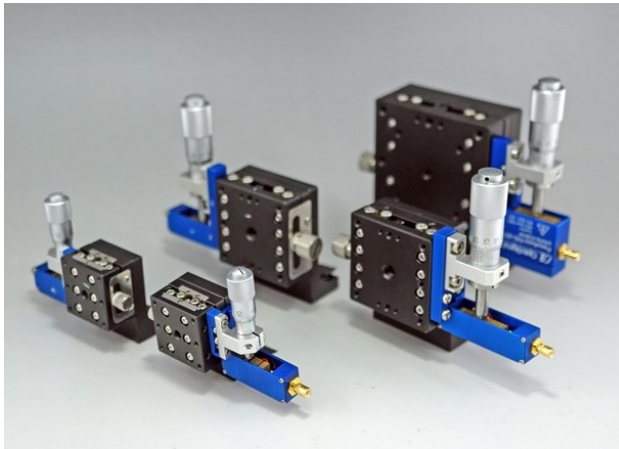
# Z Axis Piezo Assist Stage (with Z Bracket)

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.



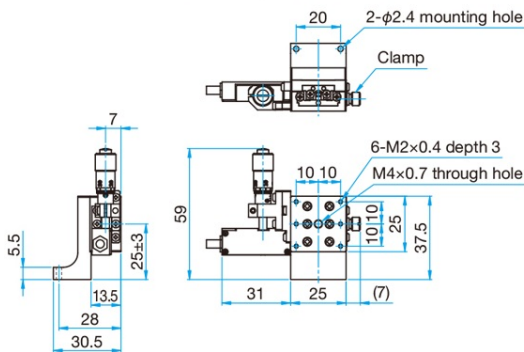
## Attention

- 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)

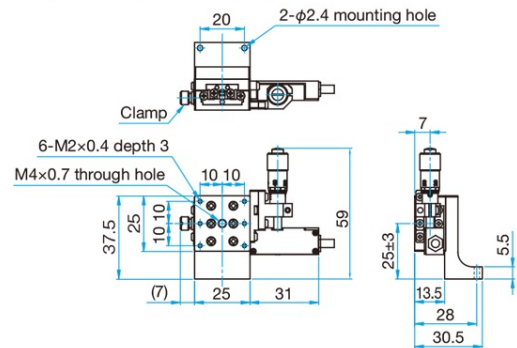
### TADC-253LPA

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



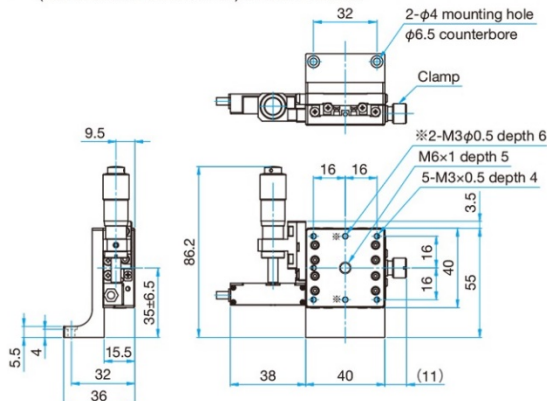
### TADC-253RLPA

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



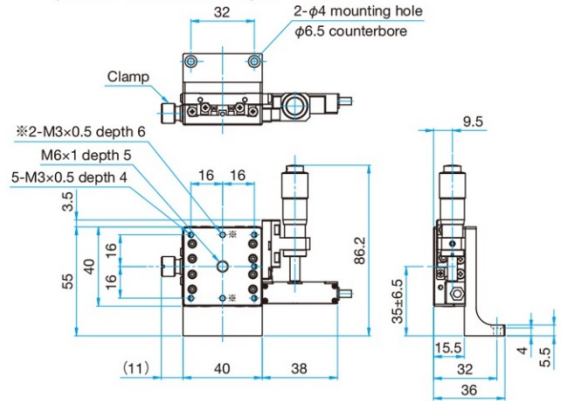
### TADC-403LPA

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



### TADC-403RLPA

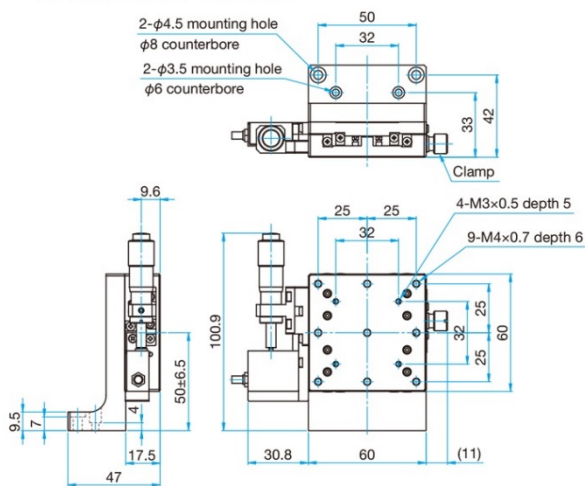
- Hexagon socket head cap screw (stainless steel construction) M3x8...2 screws



Outline Drawing (mm)

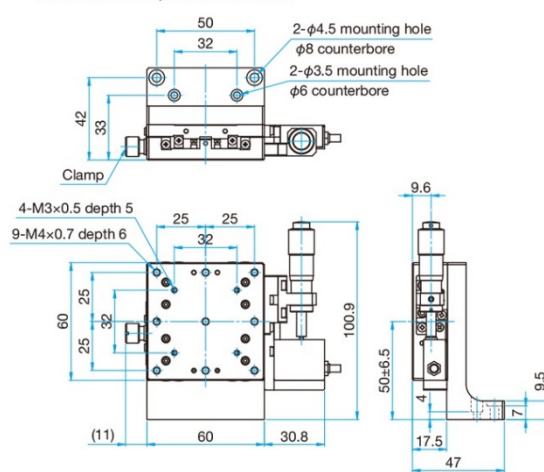
TADC-603LPA

Hexagon socket head cap screw (stainless steel construction)  
M3×8...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 Capacity	Pitch [N·m]	1.47	2.5	4.9
	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	