

X Axis Aluminum Crossed Roller Translation Stages

XY Axis Aluminum Crossed Roller Translation Stages

TAM-401

TAM-402

Stage Size 40 x 40 mm

RoHS

High precision crossed-roller linear translation stages with black anodized aluminum bodies.



Attention

- ▶ Micrometer brackets may extend above the top surface of some stages. Check drawings for detailed information.
- ▶ Note that based upon payload size, rated travel could be reduced.

Specifications

Part Number	METRIC	TAM-401C	TAM-401S	TAM-402C	TAM-402S
	INCH	TAM-401CUU	TAM-401SUU	TAM-402CUU	TAM-402SUU
(Opposite Model)	METRIC	—	TAM-401SR	—	TAM-402SR
	INCH	—	TAM-401SRUU	—	TAM-402SRUU
Stage Size [mm]		40×40	40×40	40×40	40×40
Axes of Travel		X axis		XY axis	
Micrometer Position		Center	Side	Center	Side
Travel [mm]		±6.5	±6.5	±6.5	±6.5
Lead of Actuator [mm/rotation]		0.5	0.5	0.5	0.5
Micrometer Readable Resolution [mm]		0.01	0.01	0.01	0.01
Guide Method		Crossed roller			
Primary Material		Aluminum			
Finish		Black anodized			
Load Capacity [N]		49 (5.0kgf)	49 (5.0kgf)	49 (5.0kgf)	49 (5.0kgf)
Travel Accuracy	Straightness [μm]	2	2	2	2
	Pitch ["]	40	40	40	40
	Yaw ["]	25	25	25	25
Max. Moment Capacity	Pitch [N·m]	2.75	2.75	2.75	2.75
	Roll [N·m]	3.0	3.0	2.75	2.75
	Yaw [N·m]	2.5	2.5	2.5	2.5
Moment Stiffness	Pitch [°/N·cm]	0.66	0.66	1.22	1.22
	Roll [°/N·cm]	0.36	0.36	1.22	1.22
Parallelism [μm]		30	30	50	50
Running Parallelism [μm]		10	10	20	20
Orthogonality [μm]		—	—	10	10
Options		FP/DM/WP/DL	FP/DM/WP/DL	FP/DM/WP/DL	FP/DM/WP
Weight [kg]		0.13	0.13	0.25	0.25

Option

Option Code	Compatible product		Lead of Actuator [mm/rotation]	Micrometer Readable Resolution [mm]	Reference
	Products Name	Part Number			
FP	Fine-pitch Screw Adjusters	FPSA-62540	0.25	—	E008
DM	Differential Micrometer Heads	MHF2-13F	Coars: 0.5 Fine: 0.025	Coars: 0.01 Fine: 0.0005	
WP	Sub-micron Worm Drive Micrometer Heads	WGP-13	Coars: 0.25 Fine: 0.005	Coars: 0.005 Fine: 0.0005	
DL	Differential Micrometer Heads	MDC-13	0.5	0.01	

* Please add an option code as the part number suffix to specify various optional specifications.
 * Installation may not be possible depending on the direction of DL.

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Dovetail

Lapping

V Groove Screw

Others

15 × 15 mm

25 × 25 mm

40 × 40 mm

60 × 60 mm

65 × 65 mm

80 × 80 mm

100 × 100 mm

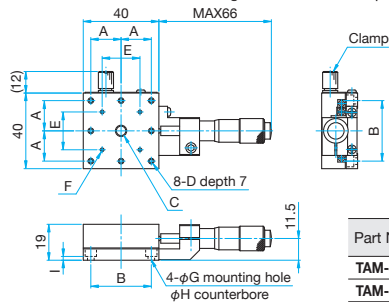
120 × 120 mm

Others



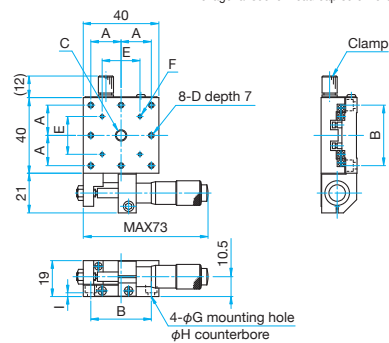
Outline Drawing

TAM-401C/401CUU Pan head screw M3×6...4 screws, Spring washers
Hexagonal socket head cap screw 6-32UNC×1/4...4 screws (UU)



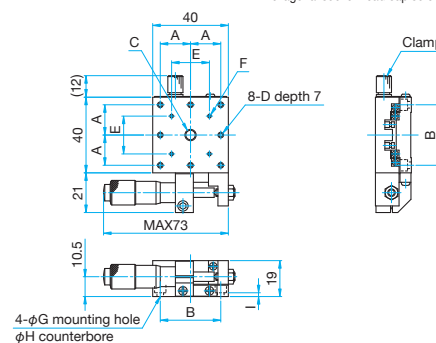
Part Number	A (mm)	B (mm)	C	D	E (mm)	F	G (mm)	H (mm)	I (mm)
TAM-401C	16	32	M6 P1 depth 8	M3	20	4-M2 depth 5	3.5	6	2
TAM-401CUU	15.875	31.75	1/4-20UNC depth 5	6-32UNC			4	6.5	1.5

TAM-401S/401SUU Pan head screw M3×6...4 screws, Spring washers
Hexagonal socket head cap screw 6-32UNC×1/4...4 screws (UU)



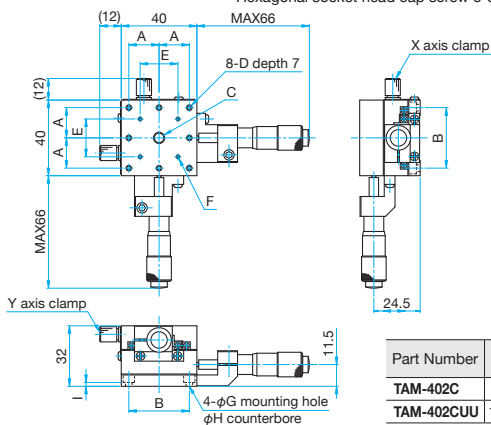
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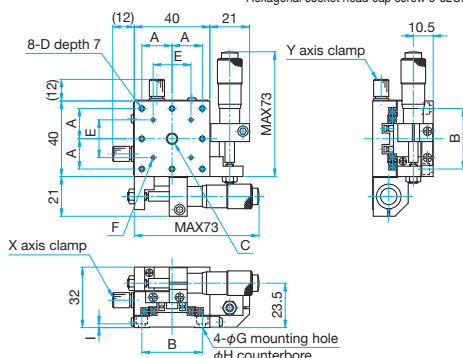
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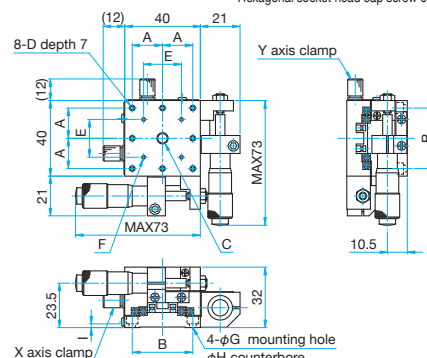
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