

X Axis Aluminum Crossed Roller Translation Stages

Stage Size 65 × 65 mm

TAM-651

RoHS

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

- Bottom counter bore clearance holes are sized and spaced to accept both M6 or 1/4 size screws for mounting these stages down to a table.
- Both M6 or 1/4-20 inch tapped hole versions available.
- Both left and right hand adjustment versions available.
- Multiple actuator options available. Standard micrometer, sub-micron micrometer, fine pitch screw.
- All stages are equipped with a robust knurled head locking screw.



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-651C-M6	TAM-651S-M6	TAM-651C25-M6	TAM-651S25-M6
	INCH	TAM-651CUU	TAM-651SUU	TAM-651C25UU	TAM-651S25UU
(Opposite Model)	METRIC	—	TAM-651SR-M6	—	—
	INCH	—	TAM-651SRUU	—	—
Stage Size [mm]		65×65	65×65	65×65	65×65
Axes of Travel		X axis			
Micrometer Position		Center	Side	Center	Side
Travel [mm]		±6.5	±6.5	±12.5	±12.5
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]		196 (20kgf)	196 (20kgf)	196 (20kgf)	196 (20kgf)
Travel Accuracy	Straightness [μm]	2	2	2	2
	Pitch ["]	25	25	35	35
	Yaw ["]	15	15	25	25
Max. Moment Capacity	Pitch [N·m]	4.9	4.9	4.9	4.9
	Roll [N·m]	4.9	4.9	4.9	4.9
	Yaw [N·m]	4.9	4.9	4.9	4.9
Moment Stiffness	Pitch [°/N·cm]	0.3	0.3	0.3	0.3
	Roll [°/N·cm]	0.25	0.25	0.25	0.25
Parallelism [μm]		30	30	30	30
Running Parallelism [μm]		10	10	10	10
Options		FP ¹ /DM/WP/DL	FP ¹ /DM/WP/DL	FP ²	FP ²
Weight [kg]		0.3	0.3	0.3	0.3

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 ¹ FPSA-62550 ²	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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Crossed Roller

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

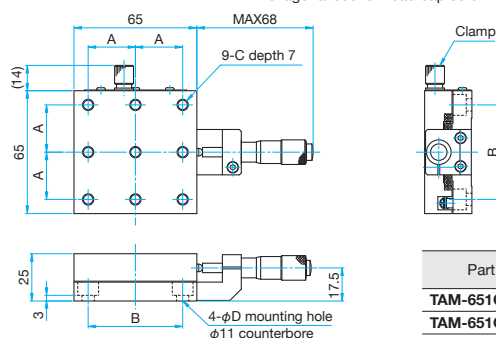
Others



Outline Drawing

TAM-651C-M6/651CUU

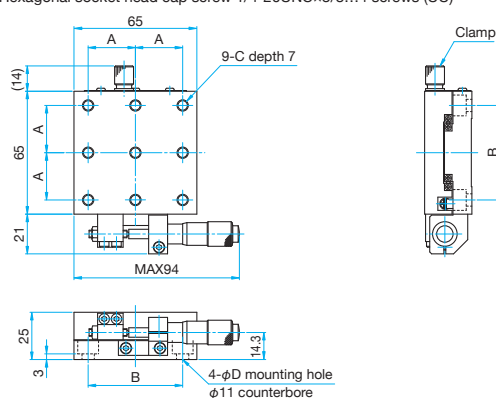
Hexagonal socket head cap screw M6×8...4 screws (M6)
Hexagonal socket head cap screw 1/4-20UNC×3/8...4 screws (UU)



Part Number	A (mm)	B (mm)	C	D (mm)
TAM-651C-M6	25	50	M6 P1	6.5
TAM-651CUU	25.4	50.8	1/4-20UNC	7

TAM-651S-M6/651SUU

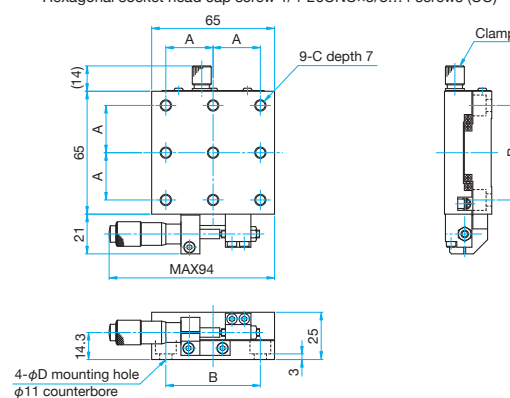
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TAM-651SR-M6/651SRUU

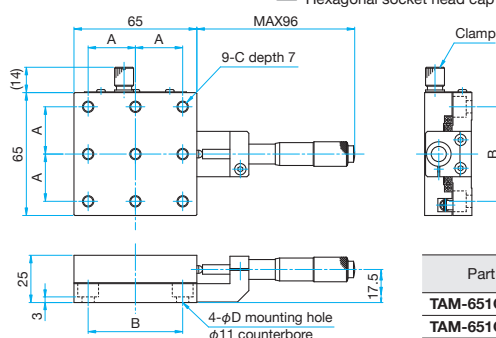
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TAM-651C25-M6/651C25UU

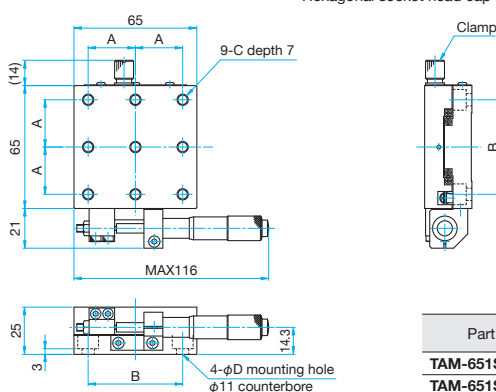
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