

XYZ Axis Aluminum Crossed Roller Translation Stages (Vertical)

Stage Size 40 × 40 mm / 60 × 60 mm

TAM-5L

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Ball Bearing Guide

Crossed Roller

Dovetail

Lapping

V Groove Screw

Others

15 × 15 mm

25 × 25 mm

40 × 40 mm

60 × 60 mm

65 × 65 mm

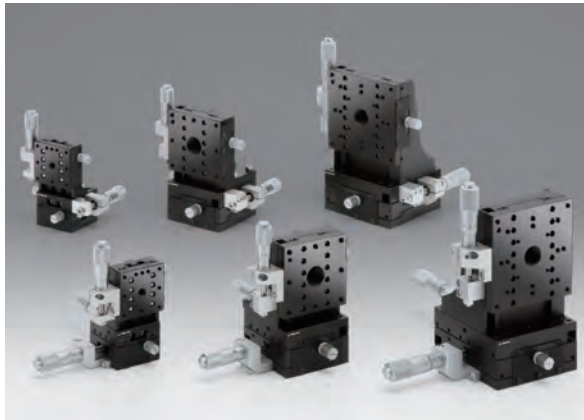
80 × 80 mm

100 × 100 mm

120 × 120 mm

Others

These XYZ assemblies incorporate an integrated (XY) axis aluminum linear stage and a (Z) axis aluminum stage with an integrated vertical bracket. Crossed roller guides enable smooth travel.



Guide

► Fine-pitch screws vs. micrometers are also available.

Specifications

Part Number	METRIC	TAM-405CL	TAM-405SL	TAM-605CL	TAM-605SL
	INCH	TAM-405CLUU	TAM-405SLUU	—	—
(Opposite Model)	METRIC	—	TAM-405SRL	—	TAM-605SRL
	INCH	—	TAM-405SRLUU	—	—
Stage Size [mm]		40×40	40×40	60×60	60×60
Axes of Travel		XYZ axis			
Micrometer Position		Center	Side	Center	Side
Travel [mm]		XY axis ±6.5 Z axis ±6.5	XY axis ±6.5 Z axis ±6.5	XY axis ±6.5 Z axis ±6.5	XY axis ±6.5 Z axis ±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 [N·m]	2.75	2.75	5.0	5.0
Max. Moment Capacity	Roll [N·m]	3.0	3.0	5.0	5.0
	Pitch [°/N·cm]	1.9	1.9	0.9	0.9
Options		FP	FP	FP	FP
Weight [kg]		0.4	0.4	0.9	0.9

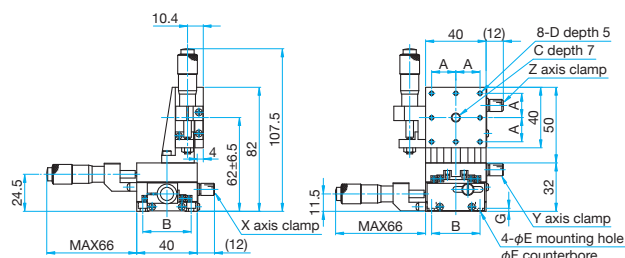
Option

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

* Please add an option code as the part number suffix to specify various optional specifications.

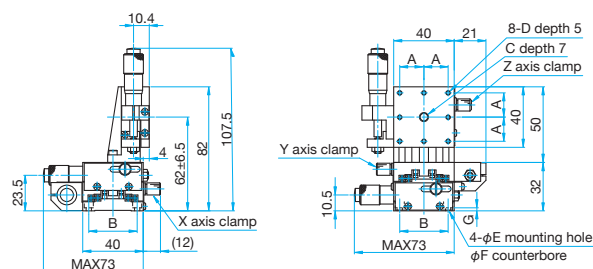
* The FP type requires a hex wrench or the optional hex wrench with knob (KCL) for driving operation. [Reference](#) F010 [Catalog Code](#) W8008

 Pan head screw M3x6...4 screws, Spring washers
Hexagonal socket head cap screw 6-32UNCx1/4...4 screws (UU)



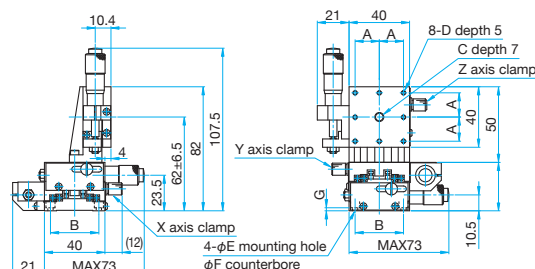
Part Number	A (mm)	B (mm)	C	D	E (mm)	F (mm)	G (mm)
TAM-405CL	16	32	M6 P1	M3	3.5	6	2
TAM-405CL III	15.875	31.75	1/4-20 UNC	6-32 UNC	4	6.5	1.5

 Pan head screw M3x6...4 screws, Spring washers
Hexagonal socket head cap screw 6-32UNCx1/4...4 screws (UU)



Part Number	A (mm)	B (mm)	C	D	E (mm)	F (mm)	G (mm)
TAM-405SL	16	32	M6 P1	M3	3.5	6	2
TAM-405SLUU	15.875	31.75	1/4-20UNC	6-32UNC	4	6.5	1.5

 Pan head screw M3x6...4 screws, Spring washers
Hexagonal socket head cap screw 6-32UNCx1/4...4 screws (UU)



Part Number	A (mm)	B (mm)	C	D	E (mm)	F (mm)	G (mm)
TAM-405SRL	16	32	M6 P1	M3	3.5	6	2
TAM-405SRLUU	15.875	31.75	1/4-20UNC	6-32UNC	4	6.5	1.5

Technical drawings of the MAX66 module showing front and top views with dimensions and labels.

Front View Dimensions:

- Overall width: 129
- Overall height: 108
- Top section width: 12.3
- Bottom section width: 60
- Bottom section height: 30.5
- Internal width: 50
- Internal height: 78±6.5
- Offset: 1.5
- Label: X axis clamp
- Label: MAX66

Top View Dimensions:

- Overall width: 60
- Overall height: 70
- Top section width: 25
- Top section height: 14
- Bottom section width: 50
- Bottom section height: 38
- Internal width: 25
- Internal height: 25
- Offset: 2.5
- Label: Y axis clamp
- Label: MAX66
- Label: 4-φ4.5 mounting hole
- Label: φ8 counterbore
- Label: Z axis clamp
- Label: M16 P1 depth 6
- Label: 8-M4 depth 8

Technical drawings of the MAX88 sensor module showing front and side views with dimensions and labels.

Front View Dimensions:

- Overall width: 12.3
- Overall height: 108
- Mounting hole diameter: 27.3
- Distance from bottom edge to mounting hole center: 50
- Distance from side edge to mounting hole center: 60
- Distance from bottom edge to X axis clamp: 78±6.5
- Distance from side edge to X axis clamp: 1.5
- Distance from bottom edge to Y axis clamp: 108
- Distance from side edge to Y axis clamp: 14

Side View Dimensions:

- Overall width: 60
- Overall height: 70
- Mounting hole diameter: 21
- Distance from bottom edge to mounting hole center: 25
- Distance from side edge to mounting hole center: 25
- Distance from bottom edge to X axis clamp: 25
- Distance from side edge to X axis clamp: 25
- Distance from bottom edge to Y axis clamp: 60
- Distance from side edge to Y axis clamp: 2.5
- Distance from bottom edge to Z axis clamp: 38
- Distance from side edge to Z axis clamp: 2.5

Labels:

- MAX88
- X axis clamp
- Y axis clamp
- Z axis clamp
- 8-M4 depth 8
- M16 P1 depth 6
- 4-φ4.5 mounting hole
- φ8 counterbore

[illegible]

XYZ Axis Aluminum Crossed Roller Translation Stages (Vertical)

Stage Size 65 × 65 mm / 80 × 80 mm

TAM-5L

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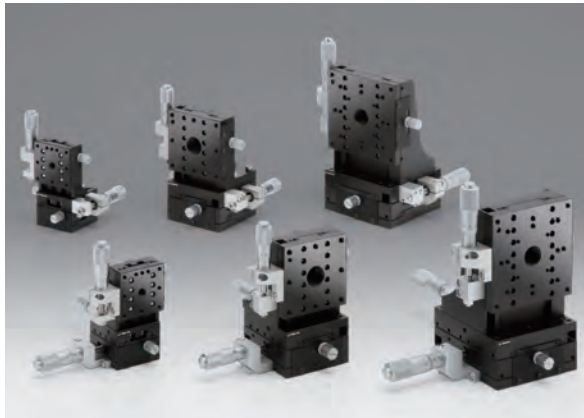
80 × 80 mm

100 × 100 mm

120 × 120 mm

Others

These XYZ assemblies incorporate an integrated (XY) axis aluminum linear stage and a (Z) axis aluminum stage with an integrated vertical bracket. Crossed roller guides enable smooth travel.



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► Fine-pitch screws vs. micrometers are also available.

Specifications

Part Number	METRIC	TAM-655CL-M6	TAM-655SL-M6	TAM-805CL	TAM-805SL
	INCH	TAM-655CLUU	TAM-655SLUU	—	—
(Opposite Model)	METRIC	—	TAM-655SRL-M6	—	—
	INCH	—	TAM-655SRLUU	—	—
Stage Size [mm]	65×65				
Axes of Travel	XYZ axis				
Micrometer Position	Center				
Travel [mm]	XY axis ±6.5 Z axis ±6.5				
Lead of Actuator [mm/rotation]	0.5				
Micrometer Readable Resolution [mm]	0.01				
Guide Method	Crossed roller				
Primary Material	Aluminum				
Finish	Black anodized				
Load Capacity [N]	49 (5.0kgf)				
Travel Accuracy	Straightness [μm]	2	2	2	2
Max. Moment Capacity	Pitch [N·m]	5.0	5.0	7.0	7.0
	Roll [N·m]	5.0	5.0	7.0	7.0
Moment Stiffness	Pitch [°/N·cm]	0.9	0.9	0.35	0.35
Options	FP				
Weight [kg]	1.15				

Option for □65mm

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

Option for □80mm

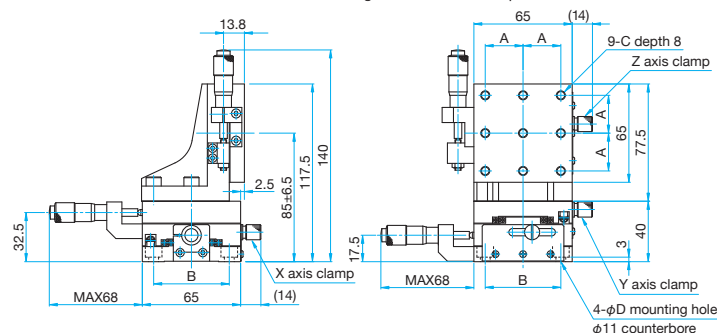
Option Code	Compatible product		Lead of Actuator [mm/rotation]	Micrometer Readable Resolution [mm]	Reference
	Products Name	Part Number			
FP	Fine-pitch Screw Adjusters	FPSA-62550	0.25	—	E008

* Please add an option code as the part number suffix to specify various optional specifications.

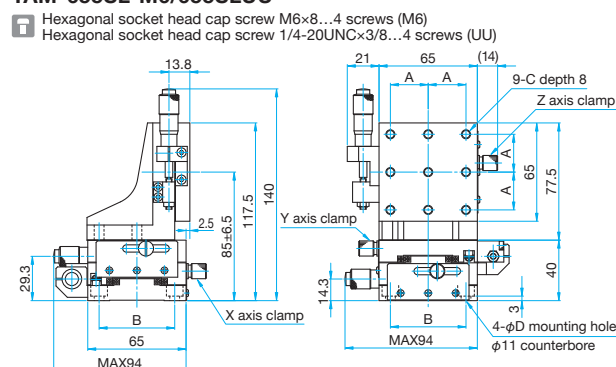
* The FP type requires a hex wrench or the optional hex wrench with knob (KCL) for driving operation. [Reference](#) F010 [Catalog Code](#) W8008



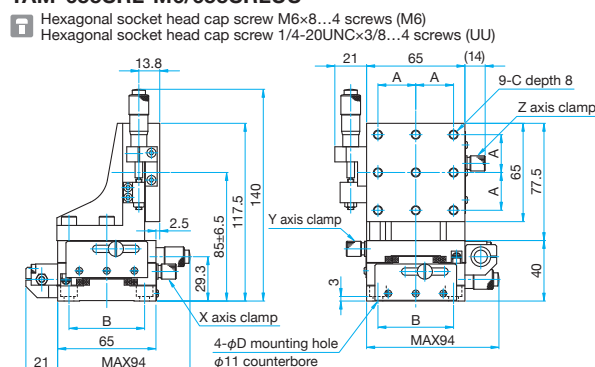
Outline Drawing

TAM-655CL-M6/655CLUU
 Hexagonal socket head cap screw M6x8...4 screws (M6)
 Hexagonal socket head cap screw 1/4-20UNCx3/8...4 screws (UU)


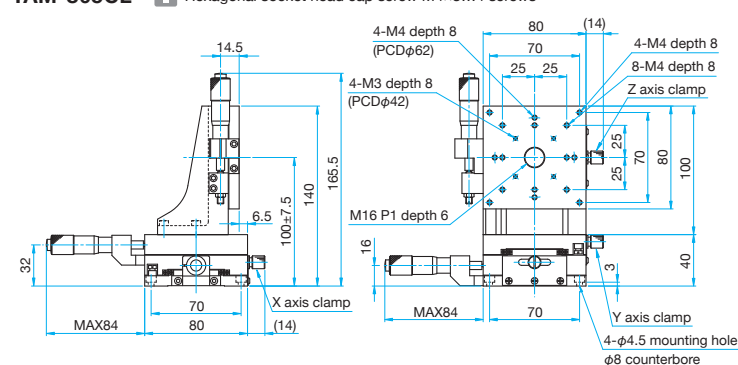
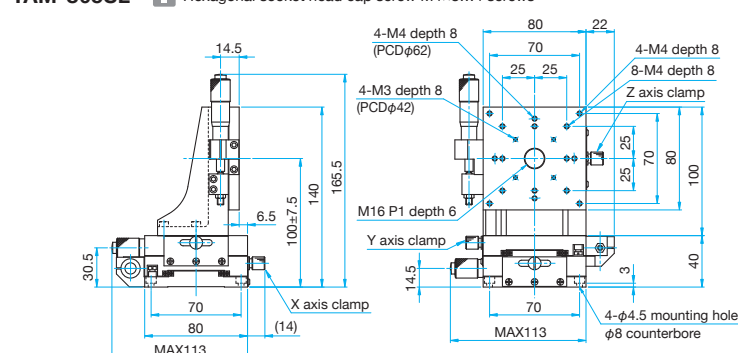
Part Number	A (mm)	B (mm)	C	D (mm)
TAM-655CL-M6	25	50	M6 P1	6.5
TAM-655CLUU	25.4	50.8	1/4-20UNC	7

TAM-655SL-M6/655SLUU
 Hexagonal socket head cap screw M6x8...4 screws (M6)
 Hexagonal socket head cap screw 1/4-20UNCx3/8...4 screws (UU)


Part Number	A (mm)	B (mm)	C	D (mm)
TAM-655SL-M6	25	50	M6 P1	6.5
TAM-655SLUU	25.4	50.8	1/4-20UNC	7

TAM-655SRL-M6/655SRLUU
 Hexagonal socket head cap screw M6x8...4 screws (M6)
 Hexagonal socket head cap screw 1/4-20UNCx3/8...4 screws (UU)


Part Number	A (mm)	B (mm)	C	D (mm)
TAM-655SRL-M6	25	50	M6 P1	6.5
TAM-655SRLUU	25.4	50.8	1/4-20UNC	7

TAM-805CL
 Hexagonal socket head cap screw M4x8...4 screws

TAM-805SL
 Hexagonal socket head cap screw M4x8...4 screws


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