

# XY Axis Long Travel Aluminum Crossed Roller Translation Stages | TAMC-2 RoHS

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

- These stages use a leadscrew drive system (2mm pitch) with a crank style handle enabling smooth, fast travel.
- The standard stages have a linear scale on the side of the stage with resolution of 1mm and a second scale on the crank(resolution of 20 $\mu$ m).
- The LS models have a digital scale with resolution of 0.1mm.



## Guide

- ▶ The TAMC-20202 supports the hole patterns of both 180 × 180mm and 175 × 175mm, possible to be directly mounted on a 25mm pitch optical breadboard.
- ▶ The models with the part number suffix LS are fitted with a digital display scale with a readable resolution of 10 $\mu$ m.
- ▶ The digital display scale has a reset function and a memory function to retain the value at the time the power is turned off (redisplay the value being displayed when the power is turned off).

Specifications					
Part Number	METRIC	TAMC-20202	TAMC-20202-M6	TAMC-30302	TAMC-30302-M6
	INCH	—	TAMC-20202UU	—	TAMC-30302UU
Stage Size [mm]		200×200	200×200	300×300	300×300
Axes of Travel		XY axis			
Micrometer Position		Center	Center	Center	Center
Travel [mm]		±50	±50	±60	±60
Lead of Actuator [mm/rotation]		2	2	2	2
Micrometer Readable Resolution [mm]		0.02	0.02	0.02	0.02
Guide Method		Crossed roller			
Primary Material		Aluminum			
Finish		Black anodized			
Load Capacity [N]		1176 (120.0kgf)	1176 (120.0kgf)	1274 (130.0kgf)	1274 (130.0kgf)
Travel Accuracy	Straightness [ $\mu$ m]	4	4	5	5
	Pitch [ " ]	60	60	60	60
	Yaw [ " ]	25	25	25	25
Max. Moment Capacity	Pitch [N·m]	112.0	112.0	117.0	117.0
	Roll [N·m]	112.0	112.0	117.0	117.0
	Yaw [N·m]	113.0	113.0	116.0	116.0
Moment Stiffness	Pitch [ " /N·cm]	0.06	0.06	0.06	0.06
	Roll [ " /N·cm]	0.06	0.06	0.06	0.06
Parallelism [ $\mu$ m]		200	200	200	200
Running Parallelism [ $\mu$ m]		50	50	80	80
Weight [kg]		6.0	6.0	16.5	16.5

Application Systems

Optics &amp; Optical Coatings

Opto-Mechanics

Bases

Manual Stages

Actuators &amp; Adjusters

Motorized Stages

Light Sources &amp; Laser Safety

Index

Guide

X Axis Stages

XY Axis Stages

Z Axis Stages

XZ Axis Stages

XYZ Axis Stages

Rotation Stages

Goniometer

Tilt Stages

Vacuum

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

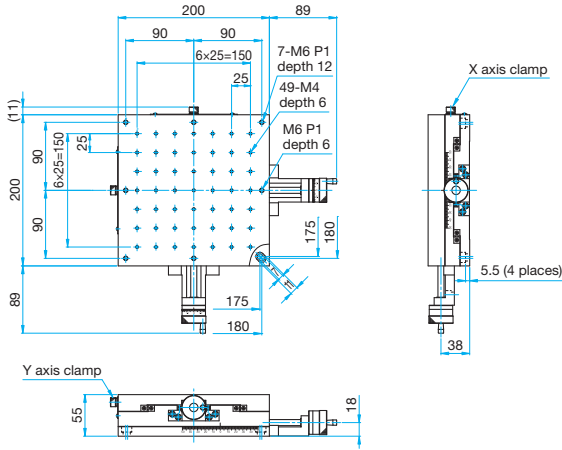
Others



**Outline Drawing**

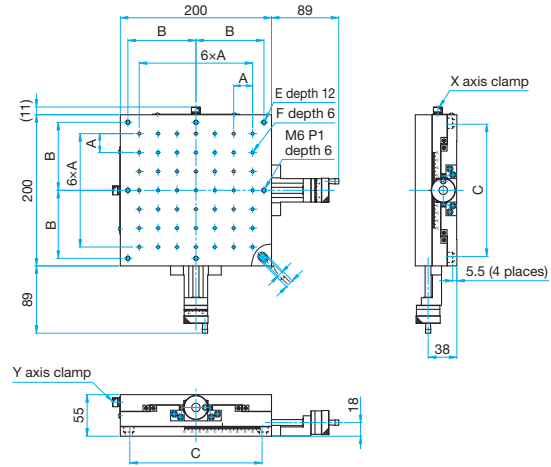
**TAMC-20202**

Hexagonal socket head cap screw M6x10...4 screws



**TAMC-20202-M6/20202UU**

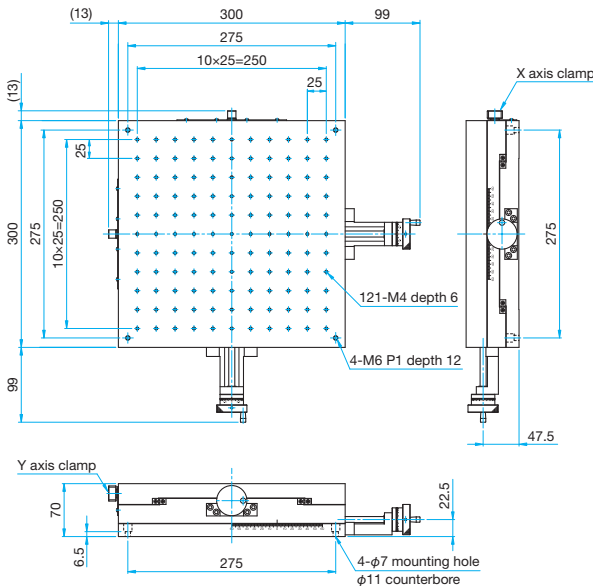
Hexagonal socket head cap screw M6x10...4 screws (M6)  
Hexagonal socket head cap screw 1/4-20UNCx1/2...4 screws (UU)



Part Number	A (mm)	B (mm)	C (mm)	E	F
TAMC-20202-M6	25	87.5	175	M6 P1	M6 P1
TAMC-20202UU	25.4	88.9	177.8	1/4-20UNC	1/4-20UNC

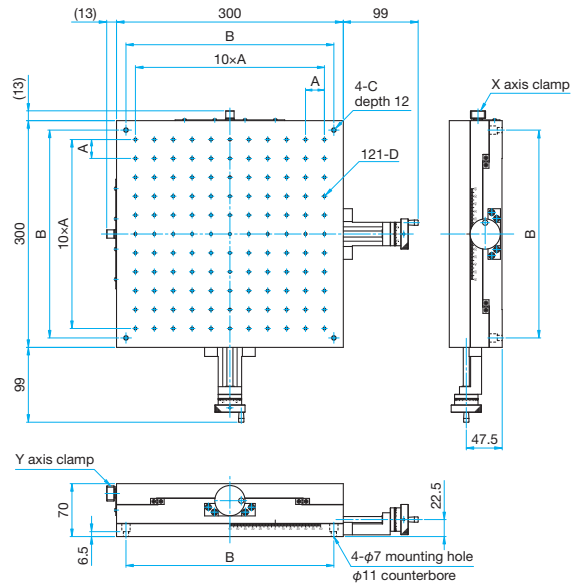
**TAMC-30302**

Hexagonal socket head cap screw M6x12...4 screws



**TAMC-30302-M6/30302UU**

Hexagonal socket head cap screw M6x12...4 screws (M6)  
Hexagonal socket head cap screw 1/4-20UNCx1/2...4 screws (UU)



Part Number	A (mm)	B (mm)	C	D
TAMC-30302-M6	25	275	M6 P1	M6 P1 depth 10
TAMC-30302UU	25.4	279.4	1/4-20UNC	1/4-20UNC depth 10

Application Systems

Optics & Optical Coatings

Opto-Mechanics

Bases

Manual Stages

Actuators & Adjusters

MotORIZED Stages

Light Sources & Laser Safety

Index

Guide

X Axis Stages

XY Axis Stages

Z Axis Stages

XZ Axis Stages

XYZ Axis Stages

Rotation Stages

Goniometer

Tilt Stages

Vacuum

Ball Bearing Guide

Crossed Roller

Dovetail

Lapping

V Groove Screw

Others

15 x 15 mm

25 x 25 mm

40 x 40 mm

60 x 60 mm

65 x 65 mm

80 x 80 mm

100 x 100 mm

120 x 120 mm

Others