

X axis Long Travel Aluminum Crossed Roller Slide Stages

MLT91

RoHS

Light-weight and high precision rectangle linear stages have black anodized aluminum bodies fitted with crossed roller bearings.



- A leadscrew drive system (2mm pitch) with crank style handle enables smooth, fast travel.
- The standard type is fitted with a scale of readable resolution 1mm on the stage and a scale of 100 steps per rotation on the handle (readable resolution 20μm).

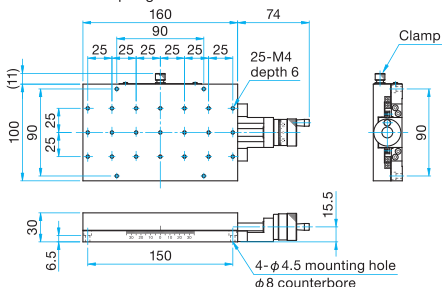
Guide

- ▶ The TAMC-20201(LS) supports hole patterns of both □180mm and □175mm, and can 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 10μm.
- ▶ 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).

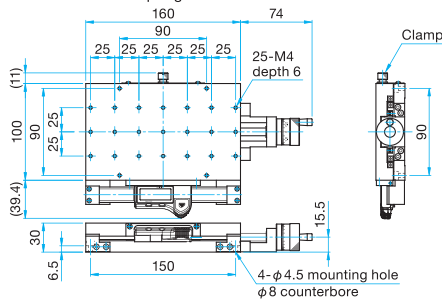


Outline Drawing

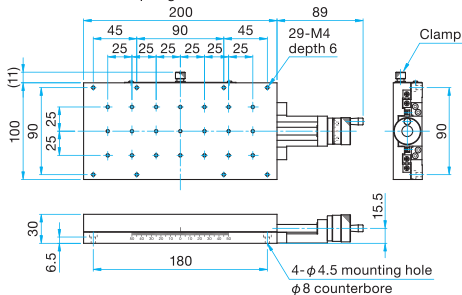
MLT91-100160 Hexagonal socket head cap screw M4x12...4 screws Spring washers



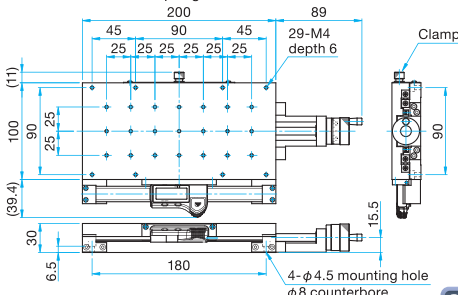
MLT91-100160LS Hexagonal socket head cap screw M4x12...4 screws Spring washers



MLT91-100200 Hexagonal socket head cap screw M4x12...4 screws Spring washers



MLT91-100200LS Hexagonal socket head cap screw M4x12...4 screws Spring washers



SPEC UP

Specifications

Part Number		MLT91-100160	MLT91-100160LS	MLT91-100200	MLT91-100200LS
Table Size [mm]		100×160	100×160	100×200	100×200
Handle Position		Center	Center	Center	Center
Travel [mm]		±35	±35	±50	±50
Lead of Actuator [mm/rotation]		2.0	2.0	2.0	2.0
Readable Resolution [mm]		0.02	0.01	0.02	0.01
Positioning Slide		Crossed roller	Crossed roller	Crossed roller	Crossed roller
Primary Material		Aluminum	Aluminum	Aluminum	Aluminum
Finish		Black anodized	Black anodized	Black anodized	Black anodized
Load Capacity [N]		588 (60.0kgf)	588 (60.0kgf)	980 (100.0kgf)	980 (100.0kgf)
Travel Accuracy	Straightness [μm]	2	2	3	3
	Pitch ["]	40	40	60	60
	Yaw ["]	25	25	25	25
Max. Moment Capacity	Pitch [N·m]	62.8	62.8	100.0	100.0
	Roll [N·m]	60.8	60.8	99.1	99.1
	Yaw [N·m]	58.8	58.8	98.1	98.1
Moment Stiffness	Pitch ["/N·cm]	0.046	0.046	0.036	0.036
	Roll ["/N·cm]	0.04	0.04	0.03	0.03
Parallelism [μm]		100	100	100	100
Running Parallelism [μm]		15	15	25	25
Weight [kg]		1.6	1.7	1.9	2.1

Application Systems

Machine Vision

Manual Positions

Motion Control Products

Optical & Mirror Holder

F A Parts

Measurement &Control

FA Electrical Parts

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Cleanroom & AntiStatic

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X Axis

XY Axis

Z Axis

XZ Axis

XYZ Axis

Rotation

Goniometers /Tilt

Multiaxis

Linear Guide

□15mm

□25mm

□50mm

□60mm

□70mm

□80mm

□100mm

□120mm

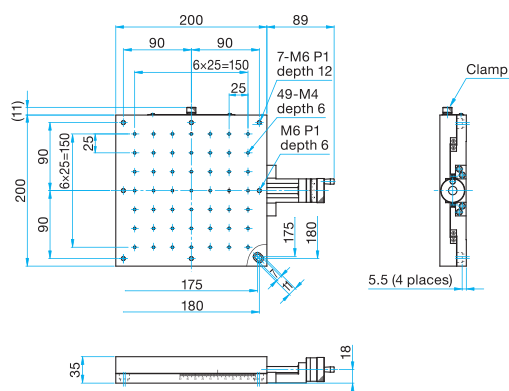
Others

Catalog Code W7018

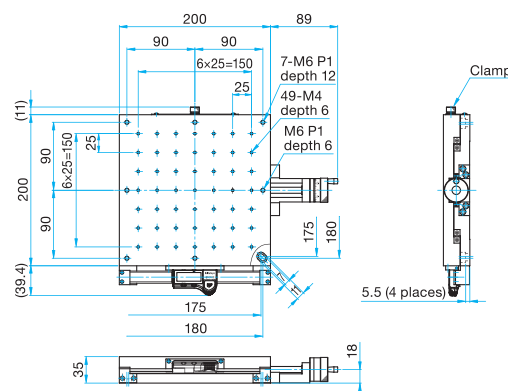


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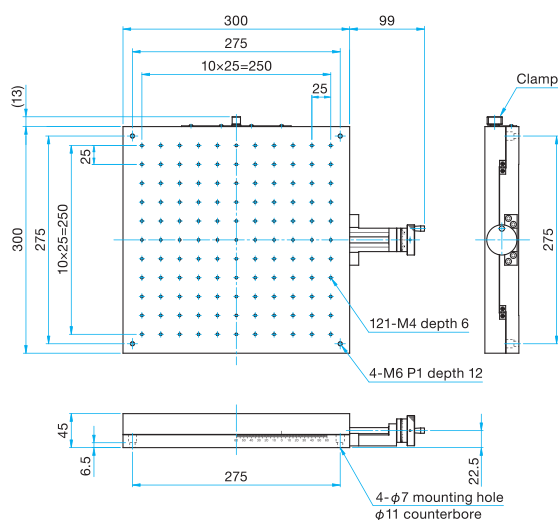
MLT91-200200 Hexagon socket head cap screw M6×10...4 screws



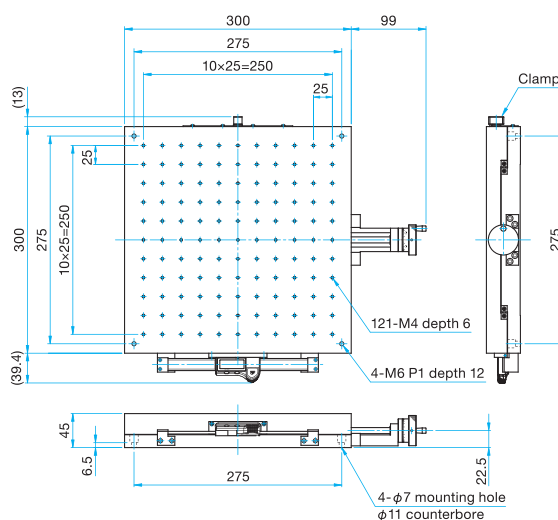
MLT91-200200LS Hexagon socket head cap screw M6×10...4 screws



MLT91-300300 Hexagon socket head cap screw M6×12...4 screws



MLT91-300300LS Hexagon socket head cap screw M6×12...4 screws



SPEC UP

Specifications

Part Number		MLT91-200200	MLT91-200200LS	MLT91-300300	MLT91-300300LS
Table Size [mm]		200×200	200×200	300×300	300×300
Handle Position		Center	Center	Center	Center
Travel [mm]		±50	±50	±60	±60
Lead of Actuator [mm/rotation]		2.0	2.0	2.0	2.0
Readable Resolution [mm]		0.02	0.01	0.02	0.01
Positioning Slide		Crossed roller	Crossed roller	Crossed roller	Crossed roller
Primary Material		Aluminum	Aluminum	Aluminum	Aluminum
Finish		Black anodized	Black anodized	Black anodized	Black anodized
Load Capacity [N]		1176 (120.0kgf)	1176 (120.0kgf)	1274 (130.0kgf)	1274 (130.0kgf)
Travel Accuracy	Straightness [μm]	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]	119.0	119.0	122.0	122.0
	Yaw [N·m]	113.0	113.0	116.0	116.0
Moment Stiffness	Pitch [°/N·cm]	0.036	0.036	0.03	0.03
	Roll [°/N·cm]	0.026	0.026	0.024	0.024
Parallelism [μm]		100	100	100	100
Running Parallelism [μm]		25	25	40	40
Weight [kg]		3.5	3.7	10.7	10.9

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