

XYZ Axis Steel Extended Contact Translation Stages

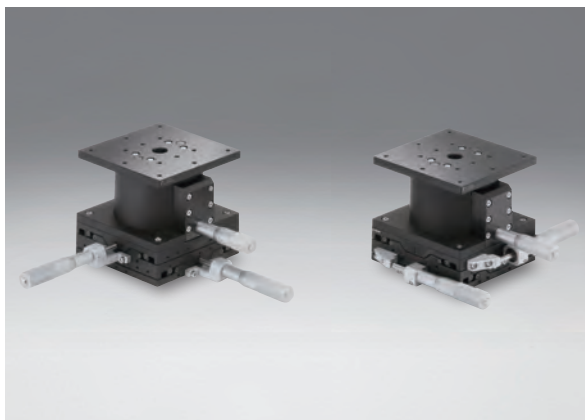
Stage Size 120 × 120 mm

TSD-1205

RoHS

This XYZ assembly incorporates an integrated (XY) axis steel linear stage and a (Z) vertical axis steel stage with a horizontal flat top plate.

There are options for metric/inch, micrometer position and fine pitch screws.



Attention

- ▶ This translation stage type is not suitable for inverted use. In this condition, all load would be pulling against the spring.
- ▶ These stages use a pivot mechanism to transfer horizontal motion to vertical motion. This mechanism induces a small non-linearity between the distance the micrometer moves and the distance the stage platform moves. Contact our Sales Division for more information.

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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

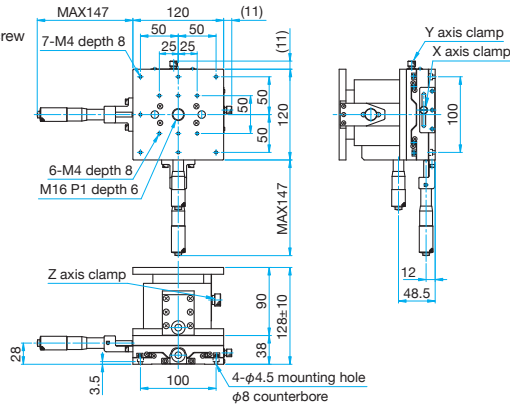
Specifications					
Part Number	METRIC	TSD-1205C	TSD-1205S	TSD-1205C-M6	TSD-1205S-M6
	INCH	—	—	TSD-1205CUU	TSD-1205SUU
(Opposite Model)	METRIC	—	TSD-1205SR	—	TSD-1205SR-M6
	INCH	—	—	—	TSD-1205SRUU
Stage Size [mm]		120×120	120×120	120×120	120×120
Axes of Travel		XYZ axis			
Micrometer Position		Center	Side	Center	Side
Travel [mm]		XY axis ±20 Z axis ±10	XY axis ±20 Z axis ±10	XY axis ±20 Z axis ±10	XY axis ±20 Z axis ±10
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		Extended contact ball bearing guide			
Primary Material		Steel			
Finish		Super black chrome + Black matte			
Load Capacity [N]		245 (25.0kgf)	245 (25.0kgf)	245 (25.0kgf)	245 (25.0kgf)
Travel Accuracy	Straightness [μm]	2.5	2.5	2.5	2.5
Max. Moment Capacity	Pitch [N·m]	9.8	9.8	9.8	9.8
	Roll [N·m]	9.8	9.8	9.8	9.8
Moment Stiffness	Pitch [°/N·cm]	0.41	0.41	0.41	0.41
	Roll [°/N·cm]	0.41	0.41	0.41	0.41
Parallelism [μm]		150	150	150	150
Weight [kg]		7.3	7.3	7.3	7.3



Outline Drawing

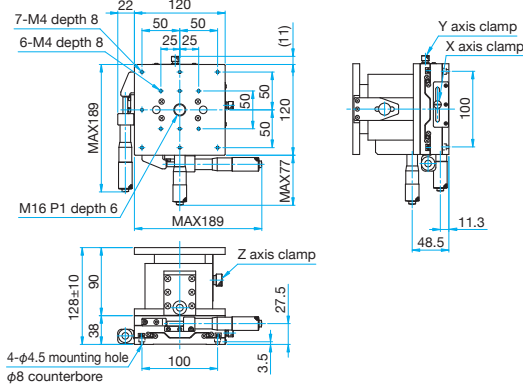
TSD-1205C

Hexagonal socket head cap screw M4x8...4 screws



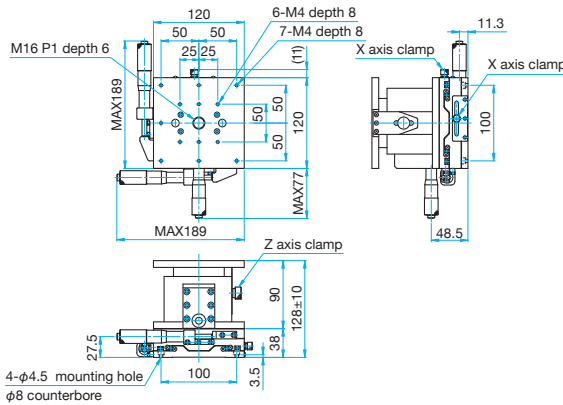
TSD-1205S

Hexagonal socket head cap screw M4x8...4 screws



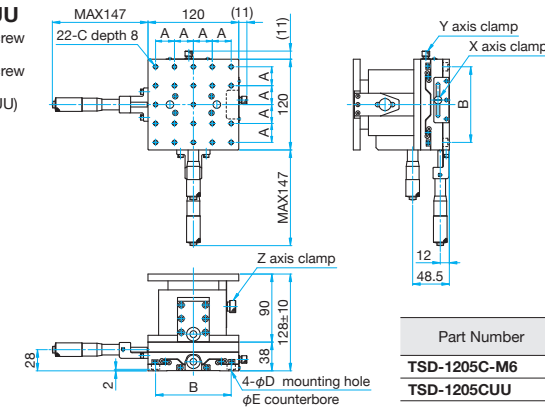
TSD-1205SR

Hexagonal socket head cap screw M4x8...4 screws



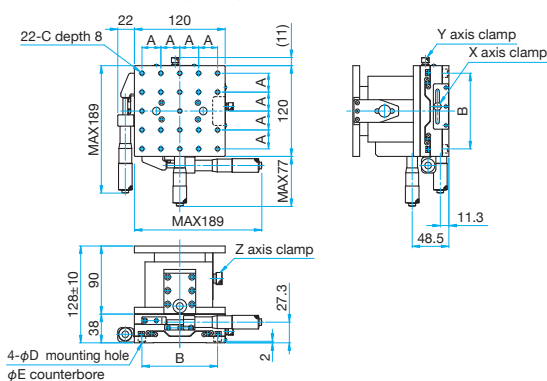
TSD-1205C-M6/1205CUU

Hexagonal socket head cap screw M6x8...4 screws (M6)
Hexagonal socket head cap screw (stainless steel construction) 1/4-20UNCx5/16...4 screws (UU)



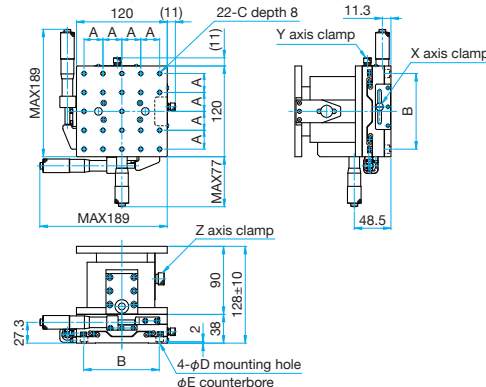
TSD-1205S-M6/1205SUU

Hexagonal socket head cap screw M6x8...4 screws (M6)
Hexagonal socket head cap screw (stainless steel construction) 1/4-20UNCx5/16...4 screws (UU)



TSD-1205SR-M6/1205SRUU

Hexagonal socket head cap screw M6x8...4 screws (M6)
Hexagonal socket head cap screw (stainless steel construction) 1/4-20UNCx5/16...4 screws (UU)



Part Number	A (mm)	B (mm)	C	D (mm)	E (mm)
TSD-1205S-M6	25	100	M6 P1	6.5	11
TSD-1205SUU	25.4	101.6	1/4-20UNC	7	12

Part Number	A (mm)	B (mm)	C	D (mm)	E (mm)
TSD-1205SR-M6	25	100	M6 P1	6.5	11
TSD-1205SRUU	25.4	101.6	1/4-20UNC	7	12

Part Number	A (mm)	B (mm)	C	D (mm)	E (mm)
TSD-1205C-M6	25	100	M6 P1	6.5	11
TSD-1205CUU	25.4	101.6	1/4-20UNC	7	12

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