

Z Axis Steel Extended Contact Translation Stages (Vertical Mounting)

Stage Size 25 × 25 mm / 40 × 40 mm / 60 × 60 mm / 65 × 65 mm

TSD-SZ **RoHS**

Z axis stages designed for mounting on a vertical surface for the load to bear on the micrometer head vs. pulling against the spring.

- Hardened Steel linear translation stages with integrated bearing ways for superior stiffness, accuracy and durability.



Guide

► Rectangular footprints are also available.

[Reference](#) E100 [Catalog Code](#) W7132

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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-251SZ	TSD-401SZ	TSD-601SZ	TSD-651SZ25-M6
	INCH	—	TSD-401SZUU	—	TSD-651SZ25UU
(Opposite Model)	METRIC	TSD-251SRZ	TSD-401SRZ	TSD-601SRZ	—
	INCH	—	TSD-401SRZUU	—	—
Stage Size [mm]		25×25	40×40	60×60	65×65
Axes of Travel		Z axis			
Travel [mm]		±3	±6.5	±6.5	±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		Extended contact ball bearing guide			
Primary Material		Steel			
Finish		Super black chrome			
Load Capacity [N]		14.7 (1.5kgf)	49 (5.0kgf)	49 (5.0kgf)	49 (5.0kgf)
Travel Accuracy	Straightness [μm]	1	1	1	1
Max. Moment Capacity	Pitch [N·m]	2.2	5.0	8.0	8.0
	Roll [N·m]	2.1	5.0	8.0	8.0
Moment Stiffness	Pitch ["/N·cm]	1.63	0.31	0.2	0.2
	Running Parallelism [μm]	10	10	10	10
Options		FP ¹	FP ²	FP ²	FP ³
Weight [kg]		0.07	0.2	0.5	0.6

Option

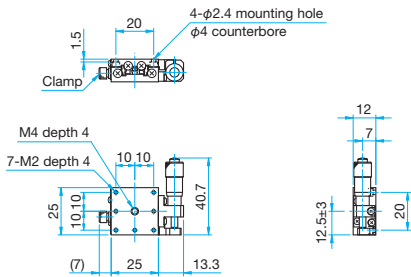
Option Code	Compatible product		Lead of Actuator [mm/rotation]	Micrometer Readable Resolution [mm]	Reference
	Products Name	Part Number			
FP	Fine-pitch Screw Adjusters	FPSA-42525 ¹ FPSA-62540 ² FPSA-62550 ³	0.25	—	E008

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

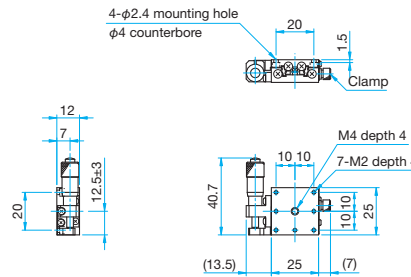


Outline Drawing

TSD-251SZ Hexagonal socket head cap screw M2x4...4 screws

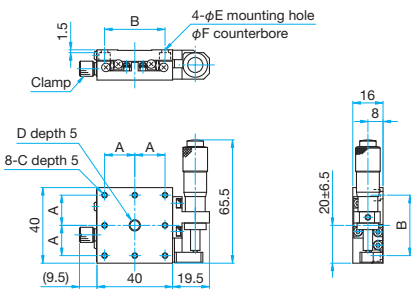


TSD-251SRZ Hexagonal socket head cap screw M2x4...4 screws



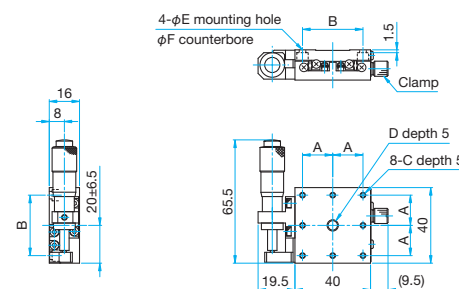
TSD-401SZ/401SZUU

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



TSD-401SRZ/401SRZUU

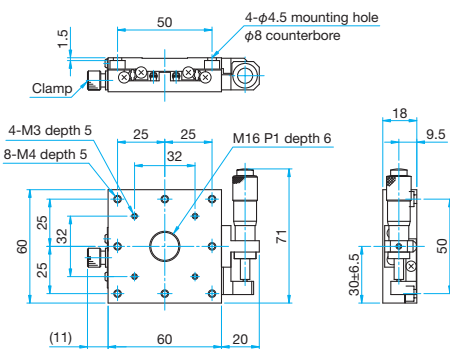
Hexagonal socket head cap screw M3x6...4 screws
Hexagonal socket head cap screw 6-32UNCx1/4...4 screws (UU)



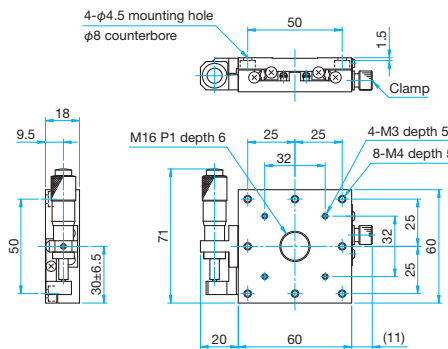
Part Number	A (mm)	B (mm)	C	D	E (mm)	F (mm)
TSD-401SZ	16	32	M3	M6 P1	3.5	6
TSD-401SZUU	15.875	31.75	6-32UNC	1/4-20UNC	4	6.5

Part Number	A (mm)	B (mm)	C	D	E (mm)	F (mm)
TSD-401SRZ	16	32	M3	M6 P1	3.5	6
TSD-401SRZUU	15.875	31.75	6-32UNC	1/4-20UNC	4	6.5

TSD-601SZ Hexagonal socket head cap screw M4x6...4 screws

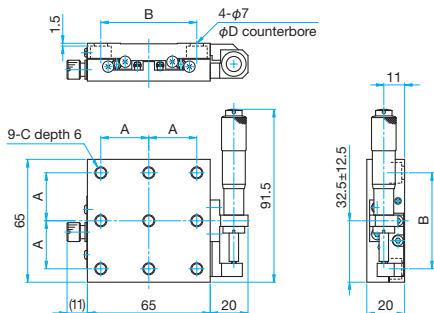


TSD-601SRZ Hexagonal socket head cap screw M4x6...4 screws



TSD-651SZ25-M6/651SZ25UU

Hexagonal socket head cap screw M6x6...4 screws (M6)
Hexagonal socket head cap screw 1/4-20UNCx1/4...4 screws (UU)



Part Number	A (mm)	B (mm)	C	D (mm)
TSD-651SZ25-M6	25	50	M6 P1	11
TSD-651SZ25UU	25.4	50.8	1/4-20UNC	12

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