

# X Axis General-Purpose Stainless Steel Translation Stages

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TSDH-251

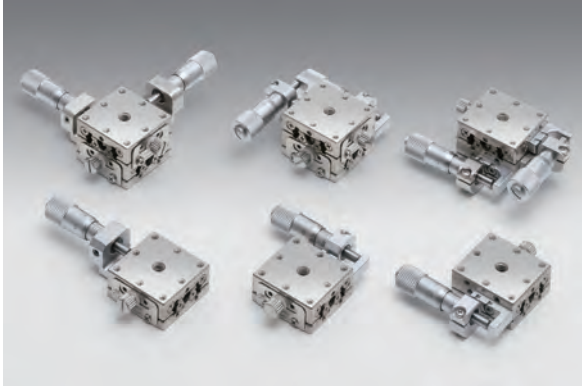
TSDH-252W

Stage Size 25 x 25 mm

RoHS

High precision stainless steel translation stages with “Extended Contact” bearing ways. High stiffness. Not intended for vacuum applications.

- Stage body consists of stainless steel (440C). To prevent rusting, the finish has been processed with electro less nickel plating.



### Guide

- ▶ Also available with a super black chrome surface finish. Please contact sales for more information.

### Attention

- ▶ Micrometer brackets may extend above the top surface of some stages. Check drawings for detailed information.

### Specifications

Part Number	METRIC	TSDH-251C	TSDH-251S	TSDH-252WC	TSDH-252WS
(Opposite Model)	METRIC	—	TSDH-251SR	—	TSDH-252WSR
Stage Size [mm]		25×25	25×25	25×25	25×25
Axes of Travel		X axis		XY axis	
Micrometer Position		Center	Side	Center	Side
Travel [mm]		±3	±3	±3	±3
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		SUS440C quench hardened			
Finish		Electroless nickel			
Load Capacity [N]		59.8 (6.0kgf)	59.8 (6.0kgf)	59.8 (6.0kgf)	59.8 (6.0kgf)
Travel Accuracy	Straightness [μm]	1	1	1	1
	Pitch [ ″ ]	30	30	30	30
	Yaw [ ″ ]	25	25	25	25
Max. Moment Capacity	Pitch [N·m]	4.0	4.0	4.0	4.0
	Roll [N·m]	5.0	5.0	4.0	4.0
	Yaw [N·m]	2.0	2.0	2.0	2.0
Moment Stiffness	Pitch [ ″/N·cm]	1.8	1.8	3.4	3.4
	Roll [ ″/N·cm]	1.6	1.6	3.4	3.4
	Yaw [ ″/N·cm]	2.0	2.0	3.2	3.2
Parallelism [μm]		30	30	50	50
Running Parallelism [μm]		10	10	20	20
Orthogonality [μm]		—	—	10	10
Options		FP/DL	FP	FP/DL	FP
Weight [kg]		0.07	0.07	0.14	0.14

### 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	0.25	—	E008
DL	Differential Micrometer Heads	MDC-6.5	0.5	0.01	

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

\* Installation may not be possible depending on the direction of DL.

\* The suffix “-C” type uses adhesive for fixing the micrometer. Please contact our International Sales Division for more information on replacement.

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

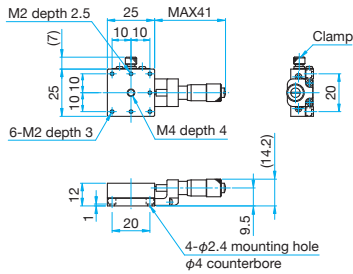
120 × 120 mm

Others

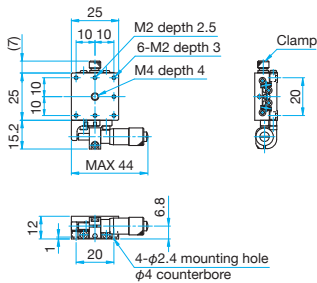


Outline Drawing

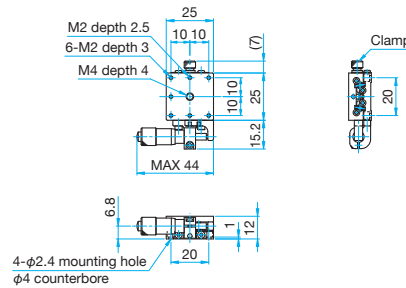
**TSDH-251C** Hexagonal socket head cap screw (stainless steel construction) M2×4...4 screws



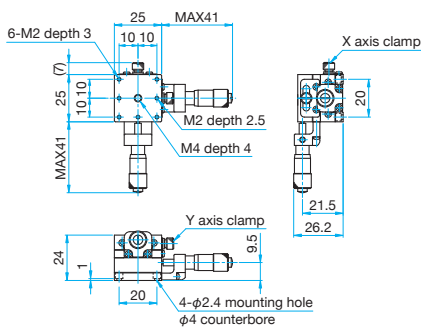
**TSDH-251S** Hexagonal socket head cap screw (stainless steel construction) M2×4...4 screws



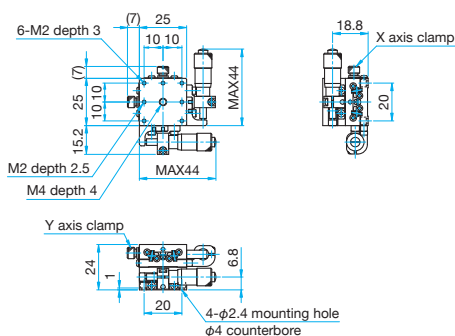
**TSDH-251SR** Hexagonal socket head cap screw (stainless steel construction) M2×4...4 screws



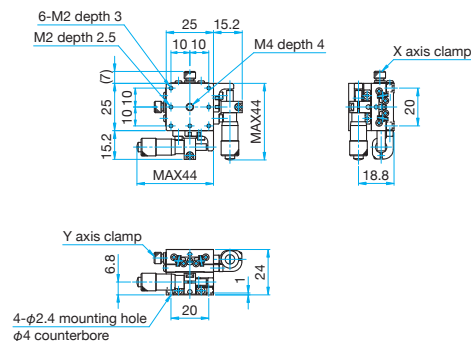
**TSDH-252WC** Hexagonal socket head cap screw (stainless steel construction) M2×4...4 screws



**TSDH-252WS** Hexagonal socket head cap screw (stainless steel construction) M2×4...4 screws



**TSDH-252WSR** Hexagonal socket head cap screw (stainless steel construction) M2×4...4 screws



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Index

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