

X Axis Steel Extended Contact Translation Stages

XY Axis Steel Extended Contact Translation Stages

TSD-601

TSD-602

Stage Size 60 × 60 mm

RoHS

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X Axis Stages

XY Axis Stages

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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

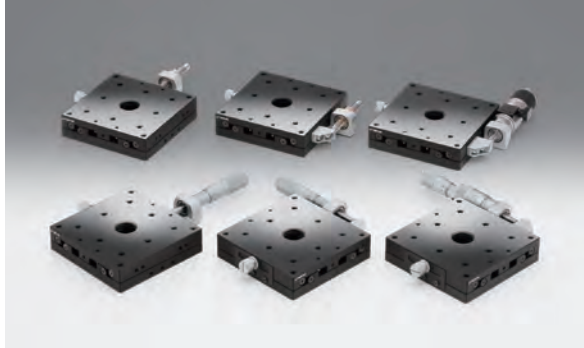
100 × 100 mm

120 × 120 mm

Others

Hardened steel linear stages with integrated bearing ways and a black chrome finish. Our “Extended Contact” technology yields superior stability, stiffness, accuracy, and durability. These XY stages are integrated and therefore have a lower profile vs. (2) single axis stages combined.

There are options for micrometer position and fine pitch screws.



Guide

► Vacuum-compatible stainless steel stages (TSDS-601/602) are also available.

TSDS-601 [Reference](#) E206 [Catalog Code](#) W7005

TSDS-602 [Reference](#) E208 [Catalog Code](#) W7031

Attention

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

► Note that based upon payload size, rated travel could be reduced.

Specifications

Part Number	METRIC	TSD-601C	TSD-601S	TSD-602C	TSD-602S
(Opposite Model)	METRIC	—	TSD-601SR	—	TSD-602SR
Stage Size [mm]		60×60	60×60	60×60	60×60
Axes of Travel		X axis		XY axis	
Micrometer Position		Center	Side	Center	Side
Travel [mm]		±6.5	±6.5	±6.5	±6.5
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]		343 (35.0kgf)	343 (35.0kgf)	343 (35.0kgf)	343 (35.0kgf)
Travel Accuracy	Straightness [μm]	0.5	0.5	0.5	0.5
	Pitch ["]	25	25	25	25
	Yaw ["]	15	15	15	15
Max. Moment Capacity	Pitch [N·m]	13.2	13.2	13.2	13.2
	Roll [N·m]	14.7	14.7	13.2	13.2
	Yaw [N·m]	10	10	10	10
Moment Stiffness	Pitch ["/N·cm]	0.08	0.08	0.13	0.13
	Roll ["/N·cm]	0.05	0.05	0.13	0.13
	Yaw ["/N·cm]	0.08	0.08	0.16	0.16
Parallelism [μm]		15	15	30	30
Running Parallelism [μm]		7	7	12	12
Orthogonality [μm]		—	—	10	10
Options		FP/DM/WP/DL	FP/DM/WP/DL	FP/DM/WP/DL	FP/DM/WP
Weight [kg]		0.5	0.5	0.9	0.9

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-62540	0.25	—	E008
DM	Differential Micrometer Heads	MHF2-13F	Coars: 0.5 Fine: 0.025	Coars: 0.01 Fine: 0.0005	
WP	Sub-micron Worm Drive Micrometer Heads	WGP-13	Coars: 0.25 Fine: 0.005	Coars: 0.005 Fine: 0.0005	
DL	Differential Micrometer Heads	MDC-13	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.

* Replacement work requires a special tool (MNS). [Reference](#) F006 [Catalog Code](#) W8004

