

Z axis Steel Extended Contact Slide Stages

Z axis Steel Extended Contact Slide Stages (Inverted)

TSD-3 Stage size □25/□40/□60/□65mm

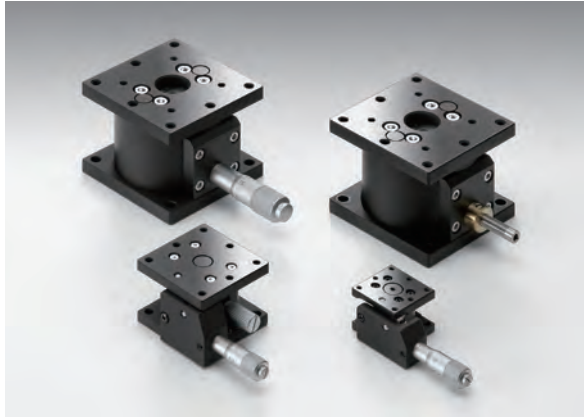
TSD-UD Stage size □60/□65mm

RoHS

Flat Z axis stages transmit the micrometer motion from a horizontal direction to a vertical direction using a pivot mechanism.

Stable in every direction and allowing precise height adjustment due to the steel balls contacting the R groove of the guide at four points during travel.

- The TSD-UD stages are hanging type stages which the Z axis steel extended contact slide stages in the TSD series could not offer. These stages enable configuration of optical systems or camera alignment on walls or ceilings which has been impossible so far.



Guide

- Vacuum-compatible stainless steel stages (TSDS) are also available.

Reference ▶ E204

Attention

- Since the structure uses the principle of leverage, the feed rate fluctuates against the scale depending on the travel (about ±0.02mm for micrometer head 0.5mm/rotation).

Specifications

Part Number	METRIC	TSD-253	TSD-403	TSD-603	TSD-653-M6	TSD-603UD	TSD-653UD-M6
	INCH	—	TSD-403UU	—	TSD-653UU	—	TSD-653UDUU
Table Size [mm]		25×25	40×40	60×60	65×65	60×60	65×65
Axes of Travel		Z axis					
Travel [mm]		±3	±3	±5	±5	±5	±5
Lead of Actuator [mm/rotation]		0.5	0.5	0.5	0.5	0.5	0.5
Micrometer Readable Resolution [mm]		0.01	0.01	0.01	0.01	0.01	0.01
Bearing type		Extended contact ball guide					
Primary Material		Steel				Steel (Upper and lower plate: Aluminum)	
Finish		Black matte				Black matte / Black anodized	
Load Capacity [N]		29.4 (3.0kgf)	88.3 (9.0kgf)	147 (15.0kgf)	147 (15.0kgf)	98 (10.0kgf)	98 (10.0kgf)
Travel Accuracy	Straightness [μm]	2.5	2.5	2.5	2.5	2.5	2.5
Max. Moment Capacity	Pitch [N·m]	1.0	3.9	6.9	6.9	6.9	6.9
	Roll [N·m]	1.0	3.9	6.9	6.9	6.9	6.9
Moment Stiffness	Pitch [°/N·cm]	5.0	1.2	0.41	0.41	0.41	0.41
	Roll [°/N·cm]	5.0	1.2	0.41	0.41	0.41	0.41
Parallelism [μm]		80	80	80	80	80	80
Running Parallelism [μm]		15	20	20	20	20	20
Options		FP ¹	FP ¹	FP ² /DM/WP	FP ² /DM/WP	—	—
Weight [kg]		0.1	0.25	1.0	1.1	1.0	1.1

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	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: 0.025	Coars: 0.005 Fine: 0.0005	

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

* The load capacity of the FP type is 39.2N (4.0kgf).

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Others

□15mm

□25mm

□40mm

□60mm

□65mm

□80mm

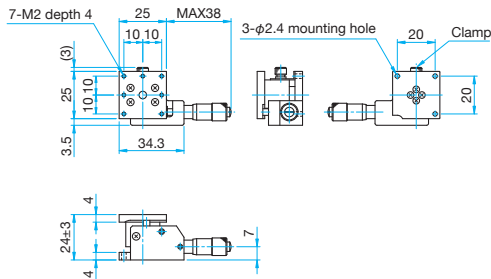
□100mm

□120mm

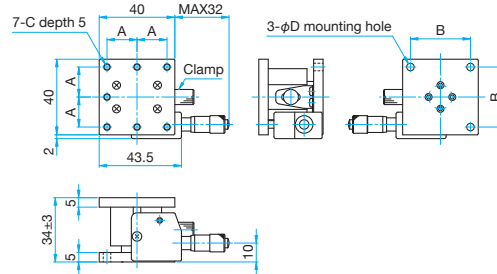
Others



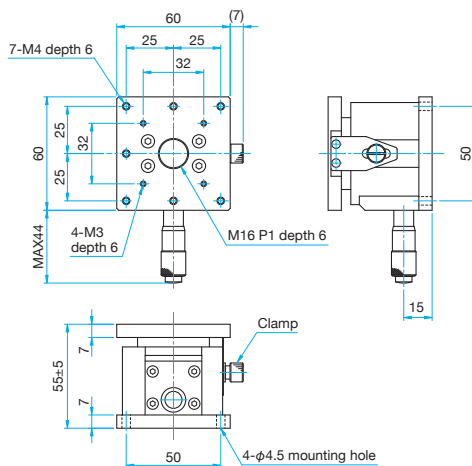
Outline Drawing

TSD-253 Hexagonal socket head cap screw M2×6...3screws**TSD-403/403UU**

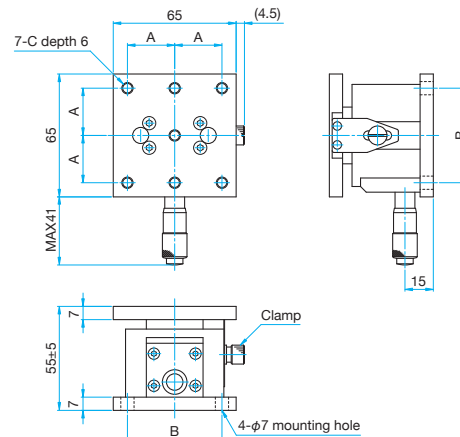
Hexagonal socket head cap screw M3×8...3screws
Hexagonal socket head cap screw 6-32UNC×5/16...3screws (UU)



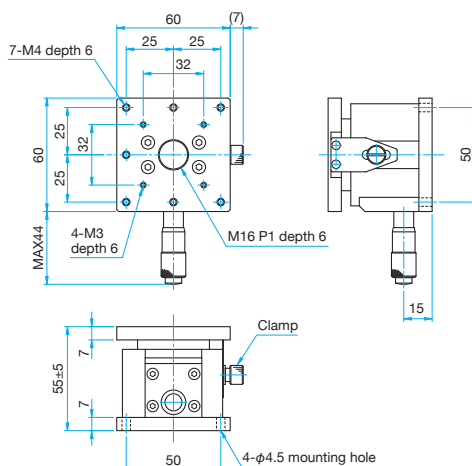
Part Number	A (mm)	B (mm)	C	D (mm)
TSD-403	16	32	M3	3.5
TSD-403UU	15.875	31.75	6-32UNC	4

TSD-603 Hexagonal socket head cap screw M4×12...4 screws**TSD-653-M6/653UU**

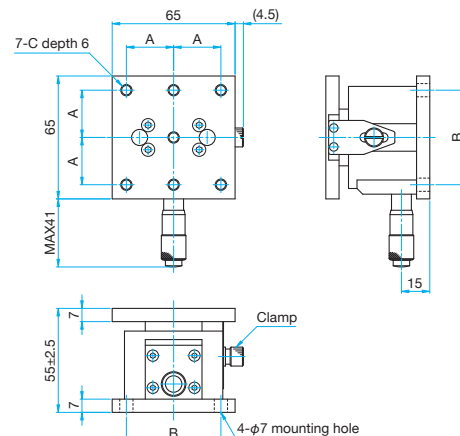
Hexagonal socket head cap screw M6×12...4 screws (M6)
Hexagonal socket head cap screw 1/4-20UNC×1/2...4 screws (UU)



Part Number	A (mm)	B (mm)	C
TSD-653-M6	25	50	M6 P1
TSD-653UU	25.4	50.8	1/4-20UNC

TSD-603UD Hexagonal socket head cap screw M4×12...4 screws**TSD-653UD-M6/653UDUU**

Hexagonal socket head cap screw M6×12...4 screws (M6)
Hexagonal socket head cap screw 1/4-20UNC×1/2...4 screws (UU)



Part Number	A (mm)	B (mm)	C
TSD-653UD-M6	25	50	M6 P1
TSD-653UDUU	25.4	50.8	1/4-20UNC

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Others

□15mm

□25mm

□40mm

□60mm

□65mm

□80mm

□100mm

□120mm

Others

Z axis Steel Extended Contact Slide Stages

TSD-3 Stage size □80/□100/□120mm

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Others

□15mm

□25mm

□40mm

□60mm

□65mm

□80mm

□100mm

□120mm

Others

Flat Z axis stages transmit the micrometer motion from a horizontal direction to a vertical direction using a pivot mechanism.

Stable in every direction and allowing precise height adjustment due to the steel balls contacting the R groove of the guide at four points during travel.



Attention

- The structure does not allow upside down installation since the spring inside the stage might not be able to withstand the load and may stretch.
- Since the structure uses the principle of leverage, the feed rate fluctuates against the scale depending on the travel (about $\pm 0.02\text{mm}$ for micrometer head 0.5mm/rotation).

Specifications

Part Number	METRIC	TSD-803	TSD-1003	TSD-1203	TSD-1203-M6
	INCH	—	—	—	TSD-1203UU
Table Size [mm]		80×80	100×100	120×120	120×120
Axes of Travel		Z axis			
Travel [mm]		±5	±10	±10	±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
Bearing type		Extended contact ball guide			
Primary Material		Steel			
Finish		Black matte			
Load Capacity [N]		147 (15.0kgf)	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]	6.9	9.8	9.8	9.8
	Roll [N·m]	6.9	9.8	9.8	9.8
Moment Stiffness	Pitch [°/N·cm]	0.41	0.36	0.36	0.36
	Roll [°/N·cm]	0.41	0.36	0.36	0.36
Parallelism [μm]		80	100	100	100
Running Parallelism [μm]		20	20	20	20
Options		FP ¹	FP ²	FP ²	FP ²
Weight [kg]		1.2	3.5	4.2	4.2

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 ¹ FPSA-62555 ²	0.25	—	E008

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

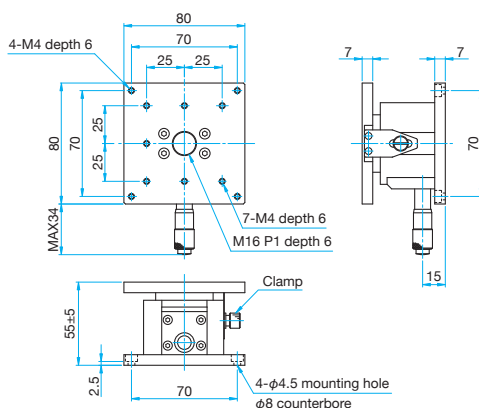
* The load capacity of the FP type is 39.2N (4.0kgf).



Outline Drawing

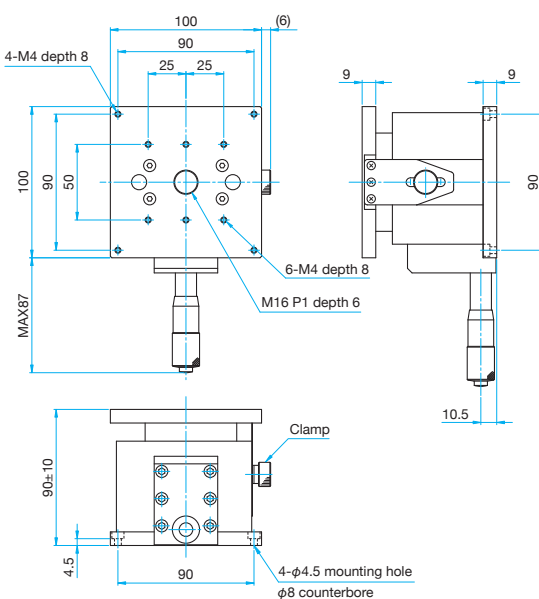
TSD-803

Hexagonal socket head cap screw
M4×8...4 screws



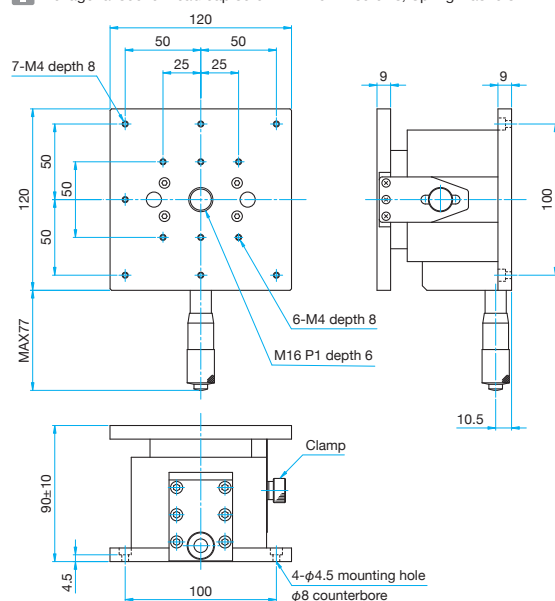
TSD-1003

Hexagonal socket head cap screw
M4×10...4 screws, Spring washers



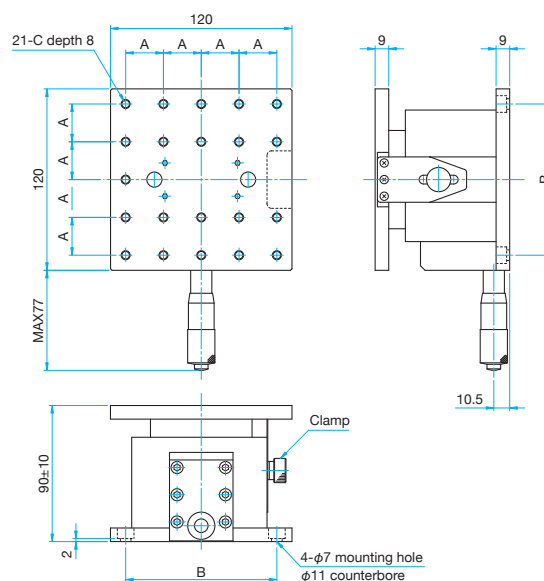
TSD-1203

Hexagonal socket head cap screw M4×10...4 screws, Spring washers



TSD-1203-M6/1203UU

Hexagonal socket head cap screw M6×8...4 screws (M6)
Hexagonal socket head cap screw 1/4-20UNC×3/8...4 screws (UU)



Part Number	A (mm)	B (mm)	C
TSD-1203-M6	25	100	M6 P1
TSD-1203UU	25.4	101.6	1/4-20UNC

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Lapping

V Groove Screw

Others

☐ 15mm☐ 25mm☐ 40mm☐ 60mm☐ 65mm☐ 80mm☐ 100mm☐ 120mm

Others

Z axis Steel Extended Contact Slide Stages (Vertical)

TSD-L Stage size □25/□40/□60/□65mm

RoHS

Z axis stages integrating a stage and Z bracket.

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



Specifications					
Part Number	METRIC	TSD-253L	TSD-403L	TSD-603L	TSD-653L-M6
	INCH	—	TSD-403LUU	—	TSD-653LUU
(Opposite Model)	METRIC	TSD-253RL	TSD-403RL	TSD-603RL	TSD-653RL-M6
	INCH	—	TSD-403RLUU	—	TSD-653RLUU
Table Size [mm]		25×25	40×40	60×60	65×65
Axes of Travel		Z axis			
Travel [mm]		±3	±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
Bearing type		Extended contact ball 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
	Pitch ["]	30	25	25	25
	Yaw ["]	25	15	15	15
Max. Moment Capacity	Pitch [N·m]	2.2	5.0	10.0	10.0
	Roll [N·m]	3.5	5.0	9.0	9.0
	Yaw [N·m]	2.0	5.0	10.0	10.0
Moment Stiffness	Pitch ["/N·cm]	1.8	0.3	0.08	0.08
	Roll ["/N·cm]	1.1	0.2	0.05	0.05
	Yaw ["/N·cm]	1.1	0.23	0.08	0.08
Running Parallelism [μm]		15	20	20	20
Squareness [μm]		30	30	30	30
Options		FP ¹	FP ² /DM/WP	FP ² /DM/WP	FP ² /DM/WP
Weight [kg]		0.1	0.3	0.8	1.0

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	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: 0.025	Coars: 0.005 Fine: 0.0005	

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

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Others

□15mm

□25mm

□40mm

□60mm

□65mm

□80mm

□100mm

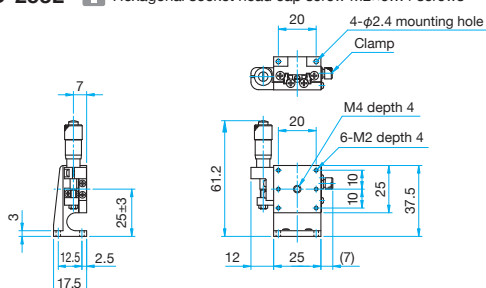
□120mm

Others

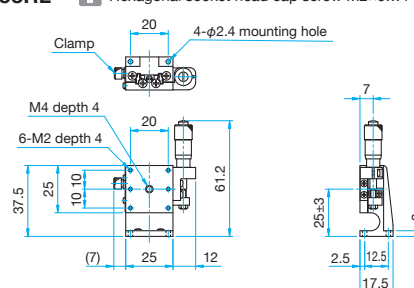


Outline Drawing

TSD-253L Hexagonal socket head cap screw M2×6...4 screws

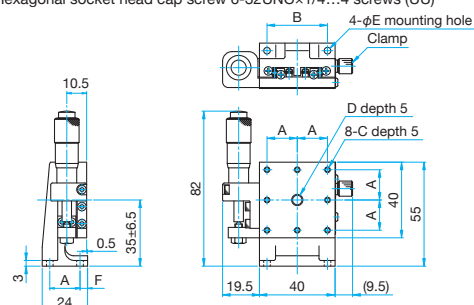


TSD-253RL Hexagonal socket head cap screw M2×6...4 screws



TSD-403L/403LUU

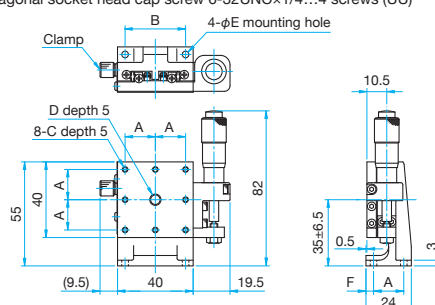
- Hexagonal socket head cap screw M3×6...4 screws
 Hexagonal socket head cap screw 6-32UNC×1/4...4 screws (UU)



Part Number	A (mm)	B (mm)	C	D	E (mm)	F (mm)
TSD-403L	16	32	M3	M6 P1	3.5	4
TSD-403LUU	15.875	31.75	6-32UNC	1/4-20UNC	4	3.625

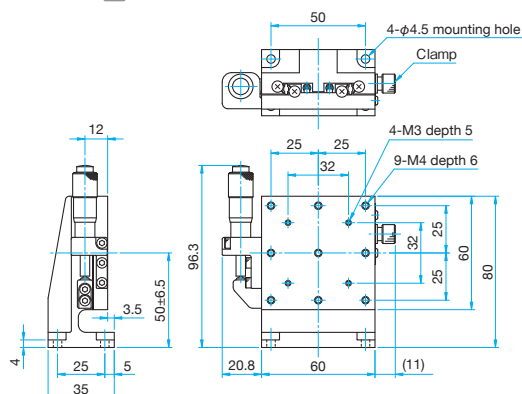
TSD-403RL/403RLUU

- Hexagonal socket head cap screw M3×6...4 screws
 Hexagonal socket head cap screw 6-32UNC×1/4...4 screws (UU)

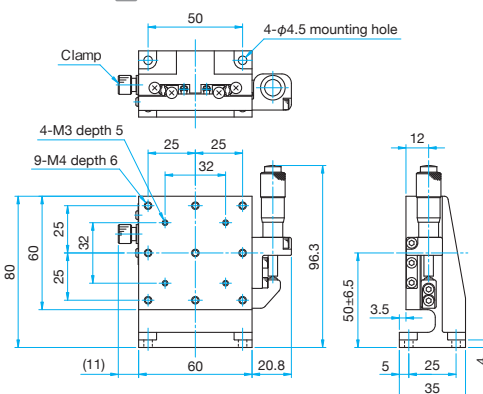


Part Number	A (mm)	B (mm)	C	D	E (mm)	F (mm)
TSD-403RL	16	32	M3	M6 P1	3.5	4
TSD-403RLUU	15.875	31.75	6-32UNC	1/4-20UNC	4	3.625

TSD-603L Hexagonal socket head cap screw M4×8...4 screws

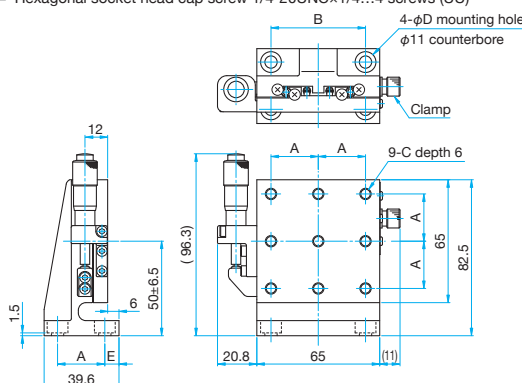


TSD-603RL Hexagonal socket head cap screw M4×8...4 screws



TSD-653L-M6/653LUU

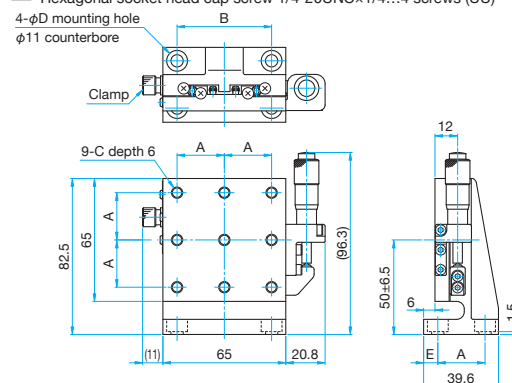
- Hexagonal socket head cap screw M6×6...4 screws (M6)
 Hexagonal socket head cap screw 1/4-20UNC×1/4...4 screws (UU)



Part Number	A (mm)	B (mm)	C	D (mm)	E (mm)
TSD-653L-M6	25	50	M6 P1	6.5	7.5
TSD-653LUU	25.4	50.8	1/4-20UNC	7	7.1

TSD-653RL-M6/653RLUU

- Hexagonal socket head cap screw M6×6...4 screws (M6)
 Hexagonal socket head cap screw 1/4-20UNC×1/4...4 screws (UU)



Part Number	A (mm)	B (mm)	C	D (mm)	E (mm)
TSD-653RL-M6	25	50	M6 P1	6.5	7.5
TSD-653RLUU	25.4	50.8	1/4-20UNC	7	7.1

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Lapping

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Others

15mm

25mm

40mm

60mm

65mm

80mm

100mm

120mm

Others

L Angle Brackets | TSD-LB

RoHS

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W7133

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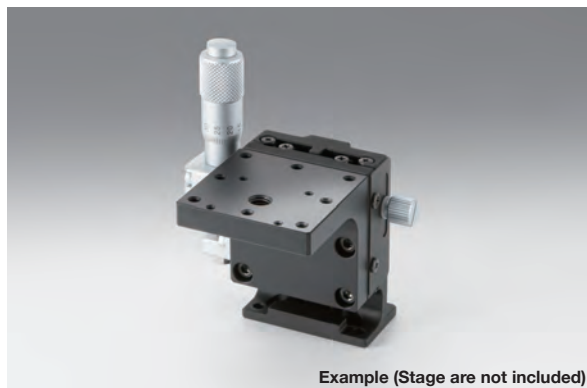
Lapping

V Groove Screw

Others

- ☐ 15mm
☐ 25mm
☐ 40mm
☐ 60mm
☐ 65mm
☐ 80mm
☐ 100mm
☐ 120mm

Others



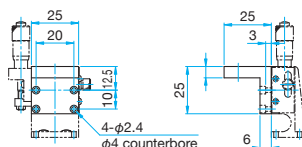
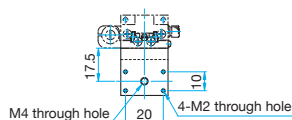
Example (Stage are not included)



Outline Drawing

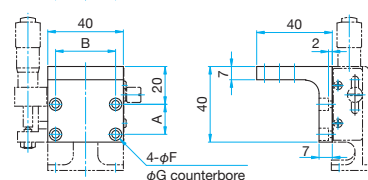
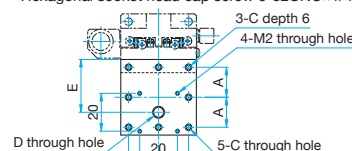
TSD-253LB

Hexagonal socket head cap screw (stainless steel construction) M2×6...4 screws



TSD-403LB-M3/403LBUU

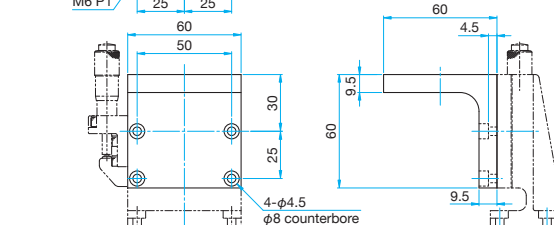
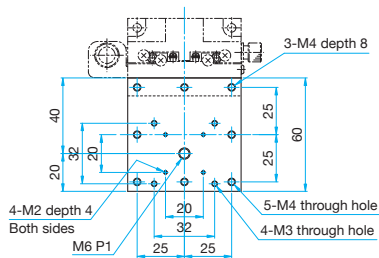
Hexagonal socket head cap screw M3×6...4 screws (M3)
 Hexagonal socket head cap screw 6-32UNC×1/4...4 screws (UU)



Part Number	A (mm)	B (mm)	C	D	E (mm)	F (mm)	G (mm)
TSD-403LB-M3	16	32	M3	M6 P1	28	3.5	6
TSD-403LBUU	15.88	31.75	6-32UNC	1/4-20UNC	27.98	4	6.5

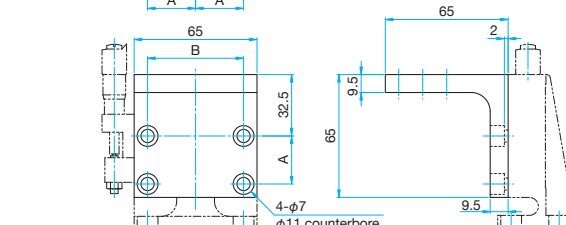
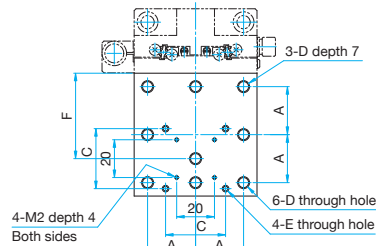
TSD-603LB

Hexagonal socket head cap screw M4×10...4 screws



TSD-653LB-M6/653LBUU

Hexagonal socket head cap screw M6×8...4 screws (M6)
 Hexagonal socket head cap screw 1/4-20UNC×5/16...4 screws (UU)



Part Number	A (mm)	B (mm)	C (mm)	D	E	F (mm)
TSD-653LB-M6	25	50	28	M6 P1	M3	45
TSD-653LBUU	25.4	50.8	27.98	1/4-20UNC	6-32UNC	45.2

Specifications

Part Number	METRIC	TSD-253LB	TSD-403LB-M3	TSD-603LB	TSD-653LB-M6
	INCH	—	TSD-403LBUU	—	TSD-653LBUU
Primary Material		Aluminum			
Finish		Black anodized			
Weight [kg]		0.03	0.05	0.07	0.08

High precision and high stiffness stainless steel stages that have guide grooves on both the quenched stainless steel stage main body and movable table.

- SUS440C as main material for this product. To prevent rusting, the finish has been processed with electroless nickel plating.



Attention

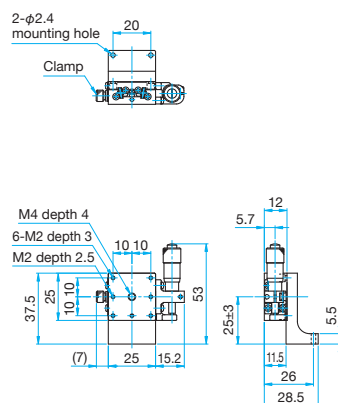
- ▶ Micrometer brackets may extend above the top surface of some stages. Check drawings for more information.
- ▶ Note that some samples might not be able to be fixed on the stage depending on their shapes, or required travel might not be ensured.



Outline Drawing

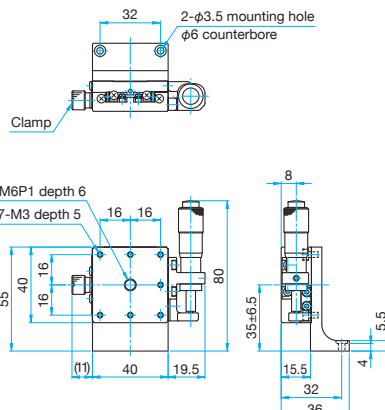
TSDH-253L

Hexagon socket head cap screw (stainless steel construction) M2×8...2 screws



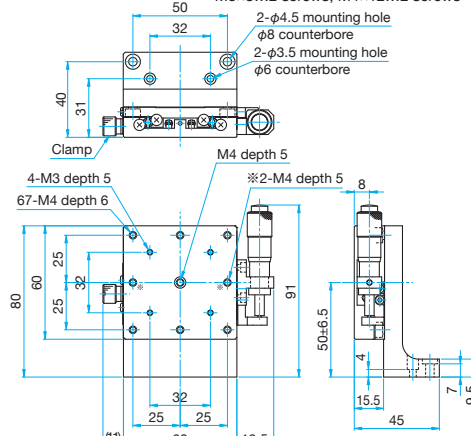
TSDH-403L

Hexagon socket head cap screw (stainless steel construction) M3×8...2 screws



TSDH-603L

Hexagon socket head cap screw (stainless steel construction) M3×8...2 screws, M4×12...2 screws



Specifications

Part Number	METRIC	TSDH-253L	TSDH-403L	TSDH-603L
Table Size [mm]		25×25	40×40	60×60
Axes of Travel		Z axis		
Travel [mm]		±3	±6.5	±6.5
Lead of Actuator [mm/rotation]		0.5	0.5	0.5
Micrometer Readable Resolution [mm]		0.01	0.01	0.01
Bearing type		Extended contact ball guide		
Primary Material		SUS440C quench hardened		
Finish		Electroless nickel		
Load Capacity [N]		9.8 (1.0kgf)	19.6 (2.0kgf)	49 (5.0kgf)
Travel Accuracy	Straightness [μm]	1	1	1
	Pitch [″]	30	30	25
	Yaw [″]	25	25	15
Max. Moment Capacity	Pitch [N·m]	0.7	1.0	1.0
	Roll [N·m]	0.5	1.0	1.0
	Yaw [N·m]	0.4	1.0	1.0
Moment Stiffness	Pitch [″/N·cm]	4.7	0.9	0.6
	Roll [″/N·cm]	3.2	0.8	0.6
	Yaw [″/N·cm]	3.0	0.6	0.4
Running Parallelism [μm]		20	20	20
Squareness [μm]		30	30	30
Options		FP ¹	FP ²	FP ²
Weight [kg]		0.1	0.25	0.65

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	0.25	—	E008

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

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Others

□15mm

□25mm

□40mm

□60mm

□65mm

□80mm

□100mm

□120mm

Others

Z axis Steel Extended Contact Slide Stages (Vertical Mounting)

TSD-SZ Stage size □25/□40/□60/□65mm

RoHS

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Others

□15mm

□25mm

□40mm

□60mm

□65mm

□80mm

□100mm

□120mm

Others

Z axis stages designed for mounting on a vertical surface with the micrometer head on the movable stage side and the micrometer stop on the bottom side of the stage.

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



Guide

► Products fitted with a long table are also available. [Reference](#) E096

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	—	—
Table 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
Bearing type		Extended contact ball 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
	Pitch [N·m]	2.2	5.0	8.0	8.0
Max. Moment Capacity	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

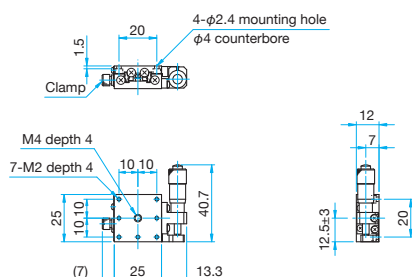
Option

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.

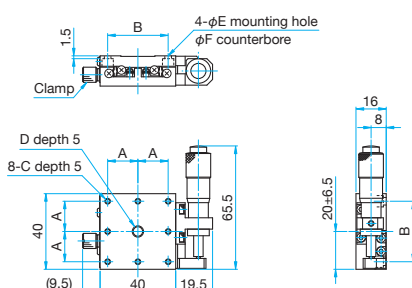
Outline Drawing

TSD-251SZ Hexagonal socket head cap screw M2×4...4 screws



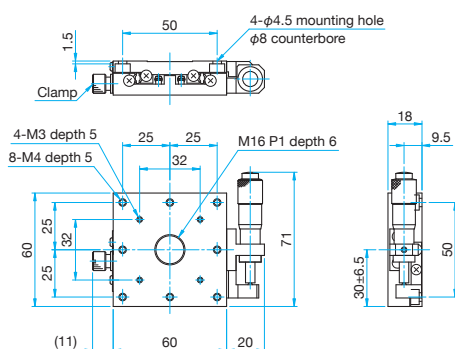
TSD-401SZ/401SZUU

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



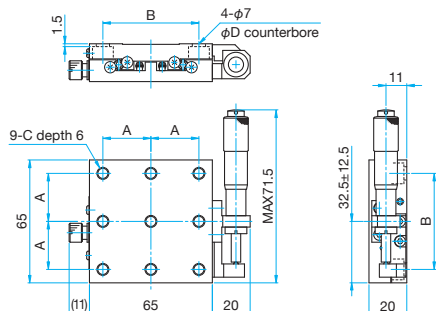
Part Number	A (mm)	B (mm)	C	D	E (mm)	F (mm)
TSD-401SZ	16	32	M3	M6 P1	3.5	6
TSD-401SZUU	15.875	31.75	6-32UNC	1/4-20UNC	4	6.5

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



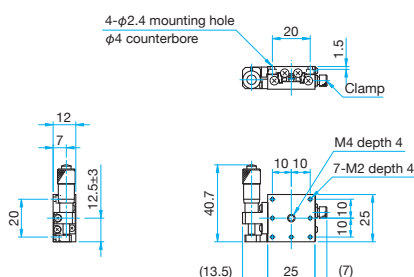
TSD-651SZ25-M6/651SZ25UU

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



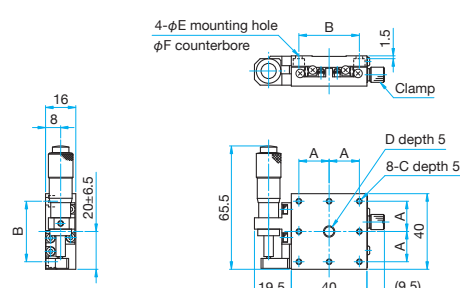
Part Number	A (mm)	B (mm)	C	D (mm)
TSD-651SZ25-M6	25	50	M6 P1	11
TSD-651SZ25UU	25.4	50.8	1/4-20UNC	12

TSD-251SRZ Hexagonal socket head cap screw M2×4...4 screws



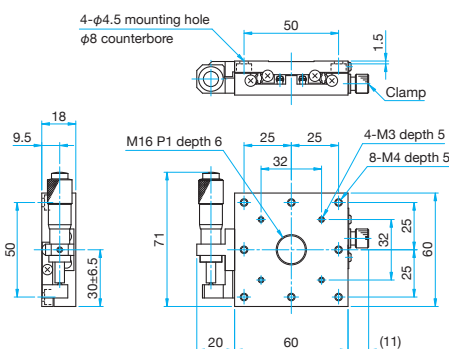
TSD-401SRZ/401SRZUU

-  Hexagonal socket head cap screw M3×6...4 screws
Hexagonal socket head cap screw 6-32UNC×1/4...4 screws (UU)



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



Z axis Steel Extended Contact Slide Stages (Vertical Mounting)

TSD-SZ

RoHS

Z axis stages designed for mounting on a vertical surface with the micrometer head on the movable stage side and the micrometer stop on the bottom side of the stage. The rectangular shape minimizes the footprint while providing longer travel.

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



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V Groove Screw

Others

15mm

25mm

40mm

60mm

65mm

80mm

100mm

120mm

Others

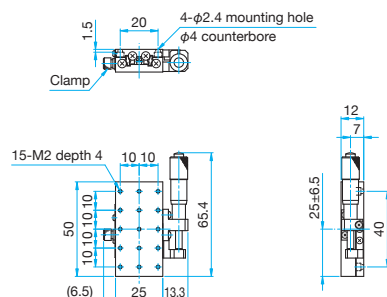
Specifications

Part Number	METRIC	TSD-25501SZ	TSD-40801SZ	TSD-60121SZ	TSD-65121SZ-M6
	INCH	—	TSD-40801SZUU	—	TSD-65121SZUU
Table Size [mm]		25×50	40×80	60×120	65×120
Axes of Travel		Z axis			
Travel [mm]		±6.5	±12.5	±20	±20
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
Bearing type		Extended contact ball guide			
Primary Material		Steel			
Finish		Super black chrome			
Load Capacity [N]		9.8 (1.0kgf)	19.6 (2.0kgf)	29.4 (3.0kgf)	29.4 (3.0kgf)
Travel Accuracy	Straightness [μm]	2	2	2	3
Max. Moment Capacity	Pitch [N·m]	2.0	2.6	3	3
	Roll [N·m]	1.4	2.6	3	3
Moment Stiffness	Pitch [°/N·cm]	1.12	0.15	0.1	0.1
Running Parallelism [μm]		10	10	10	10
Weight [kg]		0.1	0.4	1.0	1.2

Outline Drawing

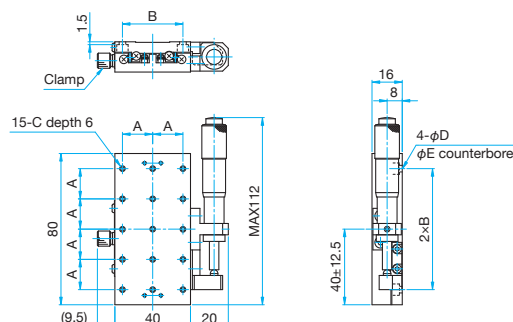
TSD-25501SZ

 Hexagonal socket head cap screw M2×4...4 screws



TSD-40801SZ/40801SZUU

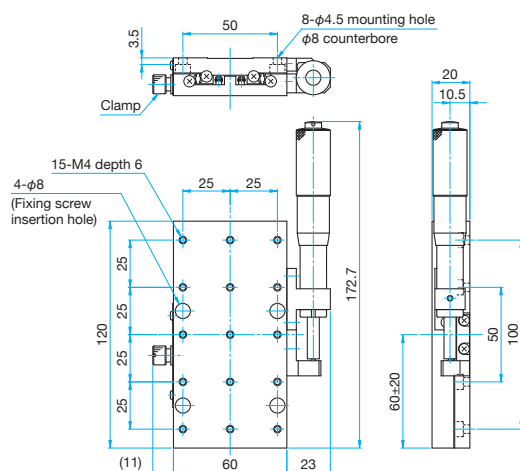
 Hexagonal socket head cap screw M3x6...4 screws
Hexagonal socket head cap screw 6-32UNCx3/16...4 screws (UU)



Part Number	A (mm)	B (mm)	C	D (mm)	E (mm)
TSD-40801SZ	16	32	M3	3.5	6
TSD-40801SZUU	15.875	31.75	6-32UNC	4	6.5

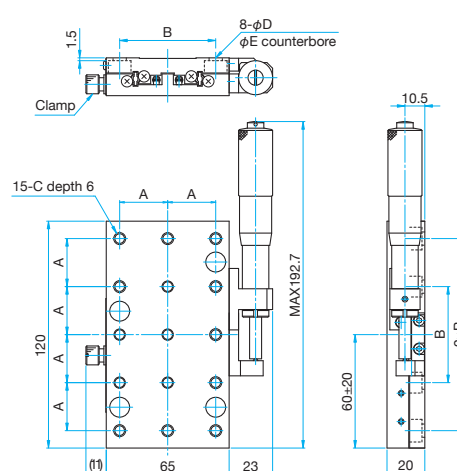
TSD-60121SZ

 Hexagonal socket head cap screw M4x8...4 screws



TSD-65121SZ-M6/65121SZUU

 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)	E (mm)
TSD-65121SZ-M6	25	50	M6 P1	6.5	11
TSD-65121SZUU	25.4	50.8	1/4-20UNC	7	12

Z axis Aluminum Crossed Roller Slide Stages (Vertical)

TAM-3L Stage size □40/□60/□65/□80mm

RoHS

Light-weight Z axis aluminum stages integrating a stage and Z bracket.
Crossed roller guide enables smooth travel.



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V Groove Screw

Others

□15mm

□25mm

□40mm

□60mm

□65mm

□80mm

□100mm

□120mm

Others

Specifications

Part Number	METRIC	TAM-403L	TAM-603L	TAM-653L-M6	TAM-803L
	INCH	TAM-403LUU	—	TAM-653LUU	—
(Opposite Model)	METRIC	TAM-403RL	—	TAM-653RL-M6	—
	INCH	TAM-403RLUU	—	TAM-653RLUU	—
Table Size [mm]		40×40	60×60	65×65	80×80
Axes of Travel		Z axis			
Travel [mm]		±6.5	±6.5	±6.5	±7.5
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
Bearing type		Crossed roller			
Primary Material		Aluminum			
Finish		Black anodized			
Load Capacity [N]		49 (5.0kgf)	49 (5.0kgf)	49 (5.0kgf)	49 (5.0kgf)
Travel Accuracy	Straightness [μm]	2	2	2	2
	Pitch [N·m]	3.0	5.0	5.0	7.0
Max. Moment Capacity	Roll [N·m]	3.0	5.0	5.0	7.0
	Pitch [°/N·cm]	0.66	0.3	0.3	0.12
Running Parallelism [μm]		20	20	20	20
Squareness [μm]		30	30	30	30
Options		FP ¹ /DM/WP	FP ¹ /DM/WP	FP ¹ /DM/WP	FP ²
Weight [kg]		0.15	0.3	0.4	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-62540 ¹ FPSA-62550 ²	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: 0.025	Coars: 0.005 Fine: 0.0005	

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

Z axis Aluminium Stages (Vertical Mounting)

TADC-L Stage size □40/□60mm

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Others

□15mm

□25mm

□40mm

□60mm

□65mm

□80mm

□100mm

□120mm

Others

The high stiffness integral guide evolved into a separate type offering low price, high stiffness and lightweight.

- High quality translation stage with smooth travel. Optimal for positioning and alignment.
- Because a steel ball travels in contact with the R groove at four points, these stages have stable load capacity in all directions.
- Special L angle brackets are attached to the TADC-SZ series.



Guide

- Vertical mounting type stages without a L angle bracket are also available. [WEB Reference](#) [Catalog Code](#) W7514

Attention

- Micrometer brackets may extend above the top surface of some stages. Check drawings for more information.
- Note that some samples might not be able to be fixed on the stage depending on their shapes, or required travel might not be ensured.

Specifications

Part Number	METRIC	TADC-403L	TADC-603L
	INCH	TADC-403LUU	—
(Opposite Model)	METRIC	TADC-403RL	TADC-603RL
	INCH	TADC-403RLUU	—
Table Size [mm]	40×40		60×60
Axes of Travel	Z axis		
Micrometer Position	Side		
Travel [mm]	±6.5		±6.5
Lead of Actuator [mm/rotation]	0.5		0.5
Micrometer Readable Resolution [mm]	0.01		0.01
Bearing type	Extended contact ball guide		
Primary Material	Aluminum		
Finish	Black anodized		
Load Capacity [N]	24.5 (2.5kgf)		29.4 (3kgf)
Travel Accuracy	Straightness [μm]	3	3
	Pitch [N·m]	2.5	4.9
Max. Moment Capacity	Roll [N·m]	2.5	4.9
	Moment Stiffness Pitch [°/N·cm]	0.66	0.3
Running Parallelism [μm]	10		10
Options	FP		FP
Weight [kg]	0.2		0.36

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

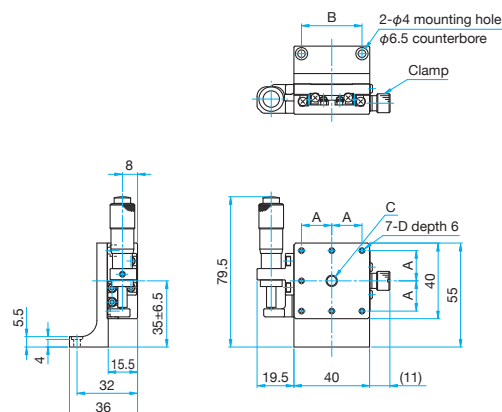
* Please add an option code as the part number suffix to specify various optional specifications.



Outline Drawing

TADC-403L/403LUU

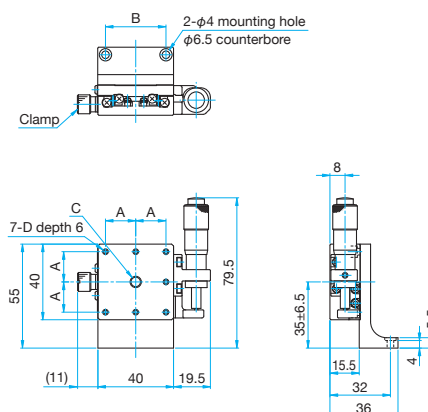
Hexagon socket head cap screw (stainless steel construction) M3×8...2 screws
Hexagon socket head cap screw (stainless steel construction) 6-32UNC×5/16...2 screws (UU)



Part Number	A (mm)	B (mm)	C	D
TADC-403L	16	32	M6 P1 depth 5	M3
TADC-403LUU	15.875	31.75	1/4-20UNC depth 5	6-32UNC

TADC-403RL/403RLUU

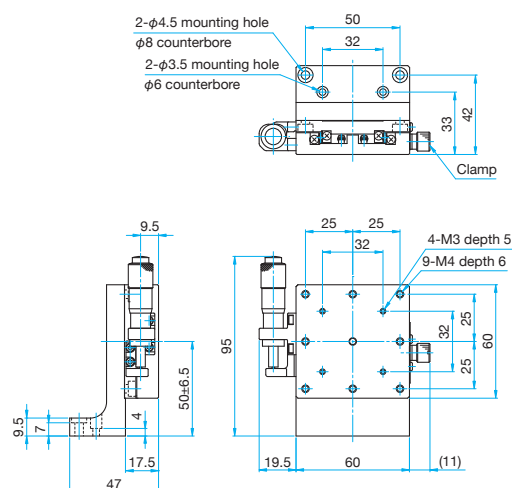
Hexagon socket head cap screw (stainless steel construction) M3×8...2 screws
Hexagon socket head cap screw (stainless steel construction) 6-32UNC×5/16...2 screws (UU)



Part Number	A (mm)	B (mm)	C	D
TADC-403RL	16	32	M6 P1 depth 5	M3
TADC-403RLUU	15.875	31.75	1/4-20UNC depth 5	6-32UNC

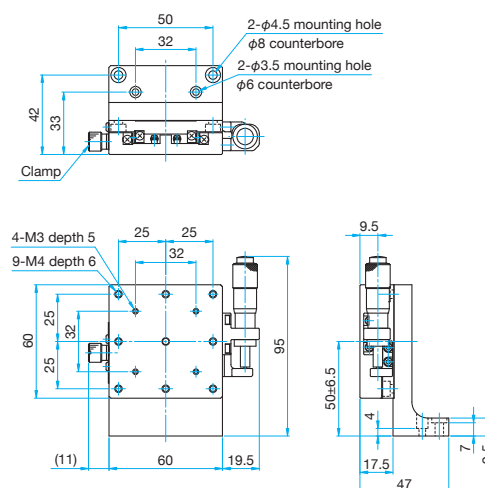
TADC-603L

Hexagonal socket head cap screw (stainless steel construction) M3×8...2 screws



TADC-603RL

Hexagonal socket head cap screw (stainless steel construction) M3×8...2 screws



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15mm

25mm

40mm

60mm

65mm

80mm

100mm

120mm

Others

Z axis Preset Stages

TASB-3 Stage size □15/□25/□40/□60/□65mm

RoHS

Space-saving, compact Z axis stages with horizontal table top, suitable for less frequent operations that require fine adjustment.

- Ideal for less frequent operations, fine adjustment or permanent fixation.
- These stages have a block shape with minimal protrusions including the adjustment knob, in order to minimizing the installation space.

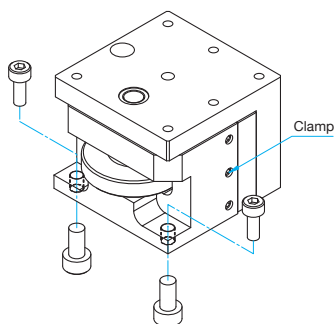


Guide

- A hex wrench with knob and clamping wrench are included.

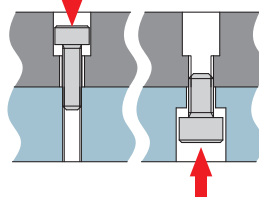


Mounting Method



Detailed Illustration

Clamp with a screw from the top



Clamp with a screw from the bottom

Top mounting

Tapped holes are used as counterbores because screws are smaller than tapped holes and will go in without any interference.

Bottom mounting

Clamp with screws that match the specification of tapped holes.

About Mounting Holes

The bottom mounting holes of preset stages are tapped holes. These stages allow mounting from the top or the bottom, convenient for securing on optical breadboards or other instruments as well as assembling in systems. Use the screws of the sizes listed in the table on the right for mounting.

Part Number	Secure from the top	Secure from the bottom
TASB-153	M2	M2.6
TASB-253	M2	M3
TASB-403	M3	M4
TASB-403UU	6-32UNC	—
TASB-603	M4	M5
TASB-653-M6	M6	M8
TASB-653UU	1/4-20UNC	5/16-18UNC

Specifications

Part Number	METRIC	TASB-153	TASB-253	TASB-403	TASB-603	TASB-653-M6
	INCH	—	—	TASB-403UU	—	TASB-653UU
Table Size [mm]		15×15	25×25	40×40	60×60	65×65
Axes of Travel		Z axis				
Travel [mm]		+2 / -0	+3 / -0	+5 / -0	+7 / -0	+7 / -0
Screw Pitch [mm]		0.4	0.5	0.5	0.5	0.5
Bearing type		Dovetail slide method				
Primary Material		Brass				
Finish		Black matte				
Load Capacity [N]		4.9 (0.5kgf)	6.9 (0.7kgf)	29.4 (3kgf)	98.1 (10kgf)	98.1 (10kgf)
Travel Accuracy	Straightness [μm]	30	30	30	30	30
	Pitch [N·m]	—	0.3	0.5	1.0	1.0
	Roll [N·m]	—	0.3	0.5	1.0	1.0
Moment Stiffness	Pitch [°/N·cm]	—	6.1	4.59	0.7	0.7
	Roll [°/N·cm]	—	4.1	2.55	1.7	1.7
Parallelism [μm]		100	100	100	100	100
Weight [kg]		0.012	0.05	0.2	0.9	1.1

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Dovetail

Lapping

V Groove Screw

Others

□15mm

□25mm

□40mm

□60mm

□65mm

□80mm

□100mm

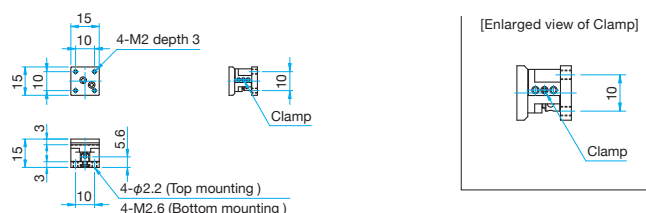
□120mm

Others

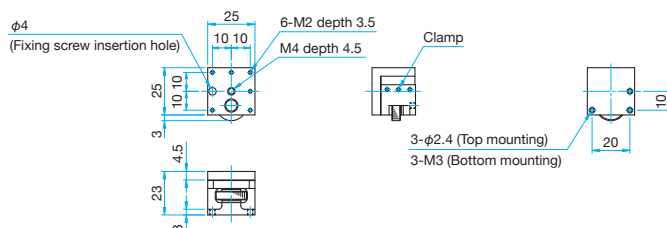


Outline Drawing

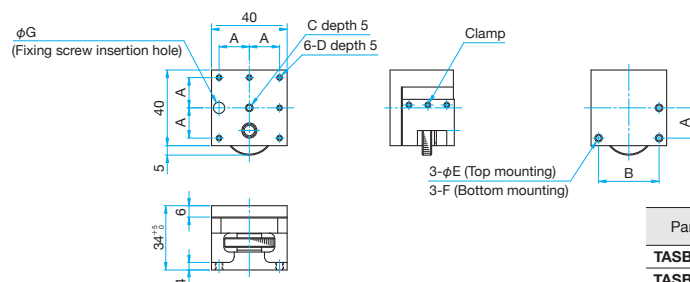
TASB-153 Hexagonal socket head cap screw M2×5...4 screws, One 0.89mm hex wrench Adjustment hole size $\phi 1.8\text{mm}$, wrench size for Clamp 0.89mm



TASB-253 Hexagonal socket head cap screw M2×6...3screws, One 0.89mm hex wrench wrench size for Clamp 0.89mm

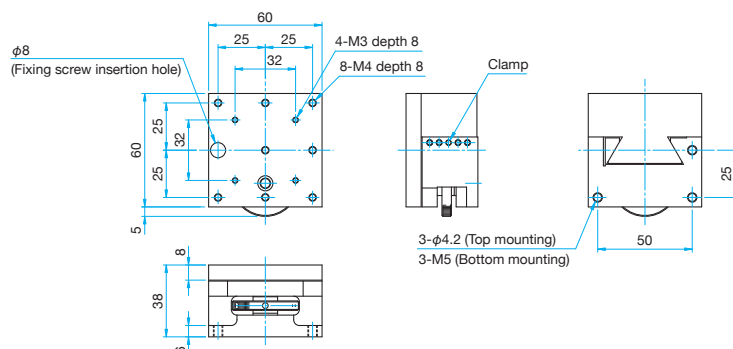


TASB-403/403UU Hexagonal socket head cap screw M3×8...3 screws, One 1.5mm hex wrench Hexagonal socket head cap screw 6-32UNC×5/16...3 screws, One 1.5mm hex wrench (UU) wrench size for Clamp 1.5mm hex wrench size for Clamp 1.5mm (UU)

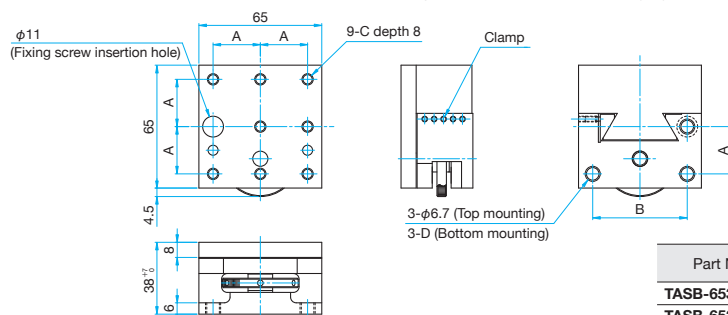


Part Number	A (mm)	B (mm)	C	D	E (mm)	F	G (mm)
TASB-403	16	32	M4	M3	3.3	4-M4	6
TASB-403UU	15.875	31.75	8-32UNC	6-32UNC	4		6.5

TASB-603 Hexagonal socket head cap screw M4×10...3 screws, One 1.5mm hex wrench Adjustment hole size $\phi 3\text{mm}$, wrench size for Clamp 1.5mm



TASB-653-M6/653UU Hexagonal socket head cap screw M6×12...3 screws, One 1.5mm hex wrench for Clamp, One 5mm hex wrench (M6) Hexagonal socket head cap screw 1/4-20UNC×1/2...3 screws, One 1.5mm hex wrench for Clamp, One 3/16inch hex wrench (UU) hex wrench size for Clamp 1.5mm, hex wrench size 5mm (M6) hex wrench size for Clamp 1.5mm, 3/16inch hex wrench (UU)



Part Number	A (mm)	B (mm)	C	D
TASB-653-M6	25	50	M6	M8
TASB-653UU	25.4	50.8	1/4-20UNC	5/16-18UNC

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V Groove Screw

Others

15mm

25mm

40mm

60mm

65mm

80mm

100mm

120mm

Others

Z axis Rack and Pinion Dovetail Stages (Vertical)

Z axis Rack and Pinion Dovetail Stages (Vertical)

TARW-L

TAR-L

RoHS

RoHS

Catalog Code W7052

Catalog Code W7053

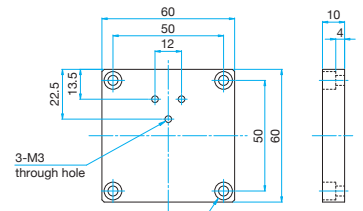
Z axis rack and pinion stages, ideal for frequent operations that require quick motion and long travel.



TAR-34403L Bottom Plate

*Primary material: Aluminum
Finish: Black Anodized*

TAR-34403L include a base plate that allows mounting on instruments or bases fitted with M4 tapped holes on $\square 50\text{mm}$, preventing the handle from contacting the mounting surface.



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V Groove Screw

Others

☐ 15mm☐ 25mm☐ 40mm☒ 60mm☐ 65mm☐ 80mm☐ 100mm☐ 120mm

Others

Specifications

Part Number	METRIC	TARW-25503L	TAR-34403L	TAR-34603L	TAR-34803L	TAR-38403L-M6	TAR-60553D	TAR-60703D
	INCH	—	—	—	—	TAR-38403LUU	—	—
Table Size [mm]		25×50	34×40	34×60	34×80	38×40	60×60	60×60
Axes of Travel		Z axis						
Travel [mm]		±10	+25 / -20	±15	+20 / -10	+45 / -0	Coars: +18 / -0 Fine: +18 / -0	Coars: +33 / -0 Fine: +33 / -0
Lead of Actuator [mm/rotation]		about 20	about 20	about 20	about 20	about 20	Coars: about 20 Fine: about 2.5	Coars: about 20 Fine: about 2.5
Vernier Readable Resolution [mm]		0.1	0.1	0.1	0.1	0.1	0.1	0.1
Bearing type		Dovetail slide method						
Primary Material		Brass / Aluminum						
Finish		Super black chrome / Black anodized						
Load Capacity [N]		9.8 (1.0kgf)	14.7 (1.5kgf)	14.7 (1.5kgf)	14.7 (1.5kgf)	14.7 (1.5kgf)	14.7 (1.5kgf)	14.7 (1.5kgf)
Travel Accuracy	Straightness [μm]	30	20	20	30	30	20	20
Max. Moment Capacity	Pitch [$\text{N}\cdot\text{m}$]	0.6	1.5	1.4	1.9	1.5	1.5	1.5
	Roll [$\text{N}\cdot\text{m}$]	0.5	1.0	1.2	1.5	1.0	1.0	1.0
Moment Stiffness	Pitch [$^{\circ}/\text{N}\cdot\text{cm}$]	1.53	0.51	0.41	0.41	0.51	0.61	0.61
Parallelism [μm]		—	—	—	—	—	80	80
Squareness [μm]		50	50	100	100	50	—	—
Weight [kg]		0.3	0.5	0.8	1.1	0.6	0.55	0.6

Z axis Long Travel Leadscrew Stages

LSV Stage size □ 160mm

RoHS

Long-type leadscrew stages for Z axis adjustment, enabling long height adjustment.



- Suitable for less frequent operations and adjustment that requires large up and down travel.
- Convenient crank style handle for adjustment.
- Tapped holes on the table top allow use in combination with other fine drive stages.

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Others

□ 15mm

□ 25mm

□ 40mm

□ 60mm

□ 65mm

□ 80mm

□ 100mm

□ 120mm

Others

Specifications

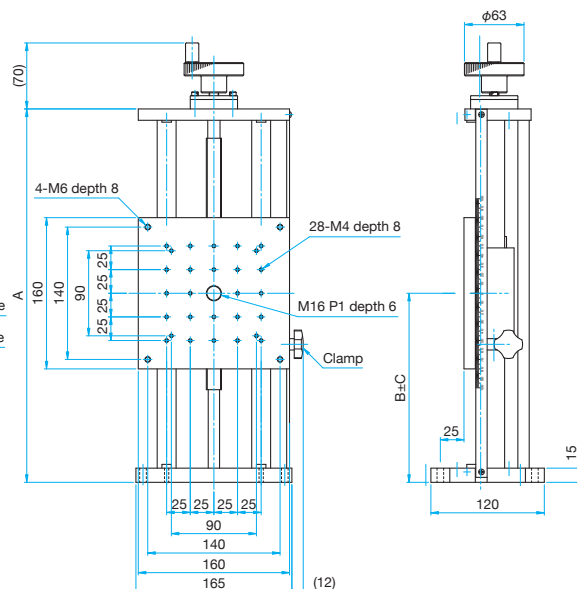
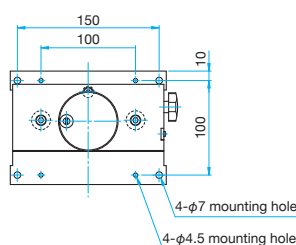
Part Number	METRIC	LSV-16100L	LSV-16100L-M6	LSV-16200L	LSV-16200L-M6
	INCH	—	LSV-16100LUU	—	LSV-16200LUU
Table Size [mm]		160×160			
Axes of Travel		Z axis			
Screw Pitch [mm]		2	2	2	2
Readable Resolution [mm]		1	1	1	1
Travel [mm]		±50	±50	±100	±100
Bearing type		Linear bearing			
Primary Material		Aluminum			
Finish		Black anodized			
Load Capacity [N]		78.4 (8.0kgf)	78.4 (8.0kgf)	78.4 (8.0kgf)	78.4 (8.0kgf)
Travel Accuracy	Straightness [μm]	10	10	10	10
Max. Moment Capacity	Pitch [N·m]	4.9	4.9	4.9	4.9
Moment Stiffness	Pitch ["/N·cm]	0.36	0.36	0.71	0.71
Weight [kg]		4.7	4.7	5.3	5.3



Outline Drawing

LSV-16100L/16200L

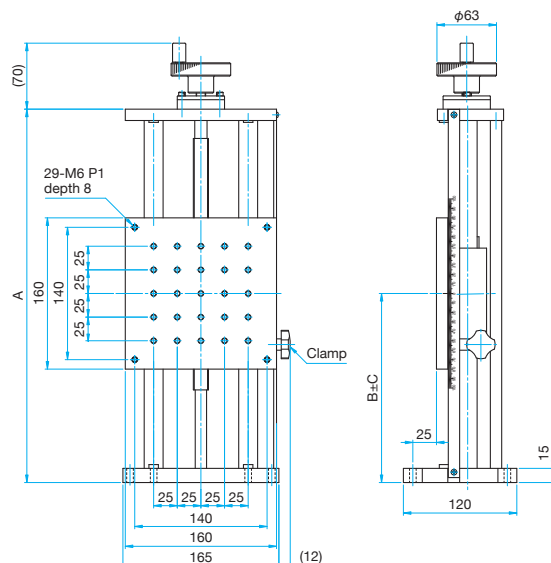
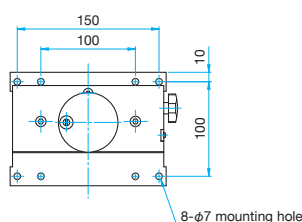
Hexagonal socket head cap screw
M6×25...4 screws,
Spring washers, Flat washers



Part Number	A (mm)	B (mm)	D (mm)
LSV-16100L	295	150	50
LSV-16200L	395	200	100

LSV-16100L-M6/16200L-M6

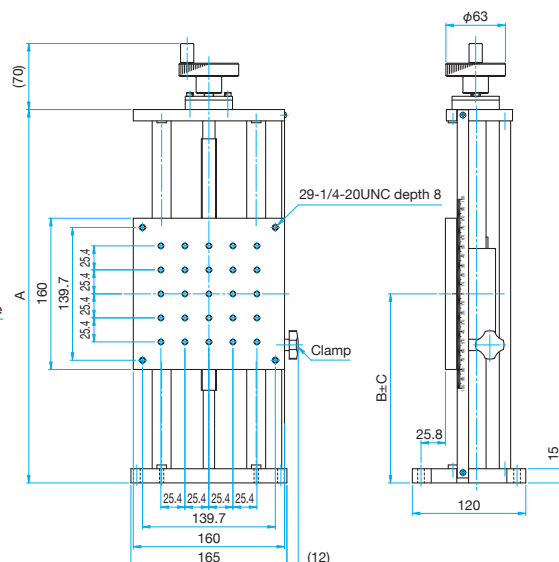
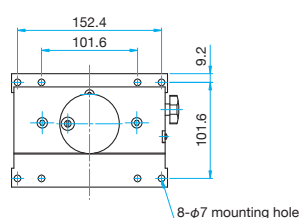
Hexagonal socket head cap screw
M6×25...4 screws,
Spring washers, Flat washers



Part Number	A (mm)	B (mm)	D (mm)
LSV-16100L-M6	295	150	50
LSV-16200L-M6	395	200	100

LSV-16100LUU/16200LUU

Hexagonal socket head cap screw
1/4-20UNC×1...4 screws,
Spring washers, Flat washers



Part Number	A (mm)	B (mm)	D (mm)
LSV-16100LUU	295	150	50
LSV-16200LUU	395	200	100

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Others

- ☐ 15mm
- ☐ 25mm
- ☐ 40mm
- ☐ 60mm
- ☐ 65mm
- ☐ 80mm
- ☐ 100mm
- ☐ 120mm

Others

Precision Labjacks | LJ/LJA

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V Groove Screw

Others

15mm

25mm

40mm

60mm

65mm

80mm

100mm

120mm

Others

Z axis precision stages that achieve extremely high parallelism using Sigma Koki's unique adjustment technology.

- The top and bottom plates of the LJ model are made of steel (magnet bases can be attached and detached), and those of the LJA are made of aluminum (light-weight).
- Pantograph mechanism provides a large adjustment range and high load capacity.
- Rotate the adjustment handle to adjust the height while keeping the table surface level.
- Firm clamping is achieved with split clamp system.



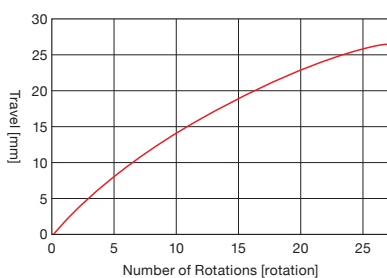
Guide

- ▶ Height is adjustable using the special spacer kits (LJS).
[Reference](#) E114
- ▶ Use the special platform (LJP) to mount larger samples.
[Reference](#) E112
- ▶ $\alpha(\beta)$ axis tilt stage (AIS) in the same size as the stage area of labjack can be mounted. [Reference](#) E194

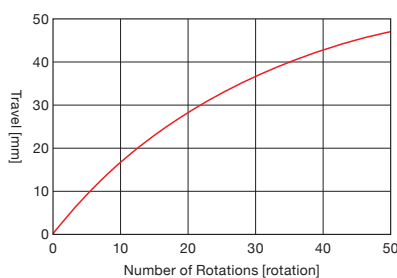


Travel Variation Per Adjustment Handle Rotation

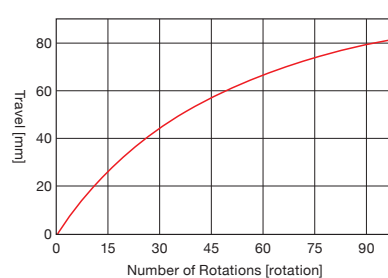
LJ/LJA-80133



LJ/LJA-10163



LJ/LJA-16223



Specifications

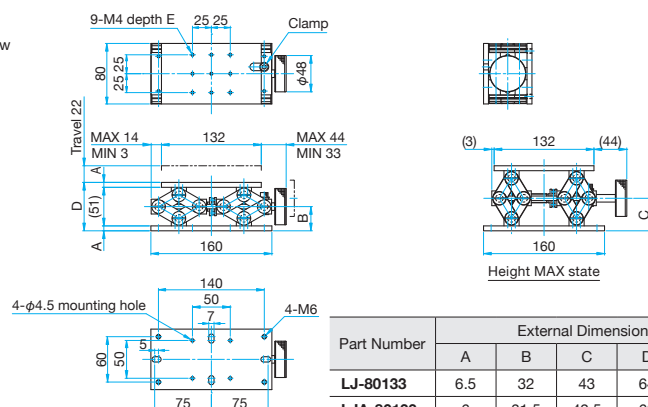
Part Number	LJ-80133	LJA-80133	LJ-10163	LJA-10163	LJ-16223	LJA-16223
Table Size [mm]	80×132	80×132	100×160	100×160	160×220	160×220
Axes of Travel	Z axis					
Travel [mm]	22	22	40	40	70	70
Primary Material	Steel	Aluminum	Steel	Aluminum	Steel	Aluminum
Finish	Super black chrome	Black anodized	Super black chrome	Black anodized	Super black chrome	Black anodized
Load Capacity [N]	196 (20.0kgf)	196 (20.0kgf)	245 (25.0kgf)	245 (25.0kgf)	294 (30.0kgf)	294 (30.0kgf)
Max. Moment Capacity	Pitch [N·m]	29.4	29.4	38	38	49
	Roll [N·m]	2.9	2.9	4	4	6
Parallelism [μ m]	100	100	100	100	100	100
Weight [kg]	3.1	2.3	5.3	3.4	9.9	5.9



Outline Drawing

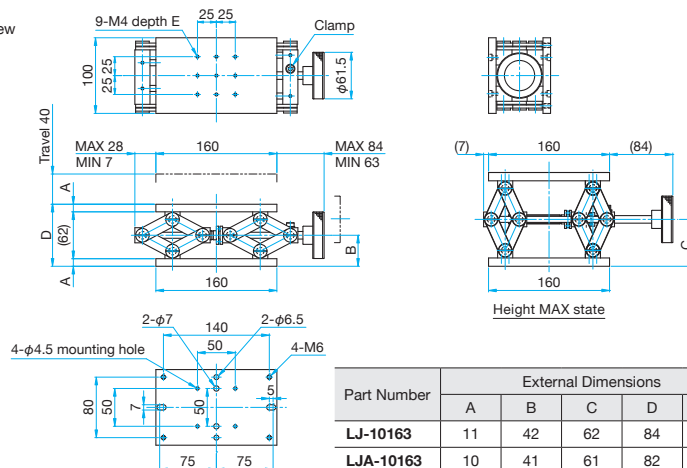
LJ/LJA-80133

- Hexagonal socket head cap screw
M6×12...4 screws,
One 5mm hex wrench



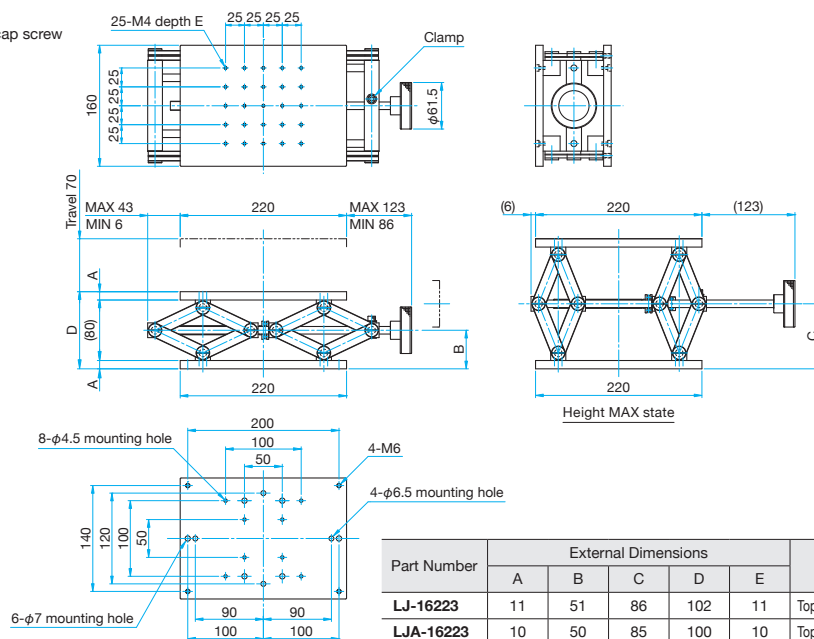
LJ/LJA-10163

- Hexagonal socket head cap screw
M6×16...4 screws,
One 5mm hex wrench



LJ/LJA-16223

- Hexagonal socket head cap screw
M6×16...4 screws,
One 5mm hex wrench



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V Groove Screw

Others

☐ 15mm
☐ 25mm
☐ 40mm
☐ 60mm
☐ 65mm
☐ 80mm
☐ 100mm
☐ 120mm

Others

Precision Labjacks | LJA-M6/LJA-UU

RoHS

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Lapping

V Groove Screw

Others

☐ 15mm☐ 25mm☐ 40mm☐ 60mm☐ 65mm☐ 80mm☐ 100mm☐ 120mm

Others

Z axis precision stages that achieve extremely high parallelism using Sigma Koki's unique adjustment technology.

- The top and bottom plates of the LJ model are made of steel (magnet bases can be attached and detached), and those of the LJA are made of aluminum (light-weight).
- Pantograph mechanism provides a large adjustment range and high load capacity.
- Rotate the adjustment handle to adjust the height while keeping the table surface level.
- Firm clamping is achieved with split clamp system.

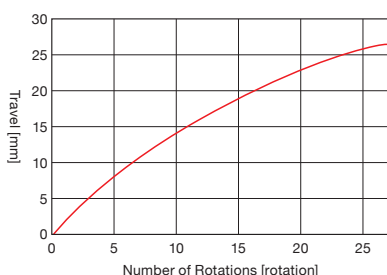


Guide

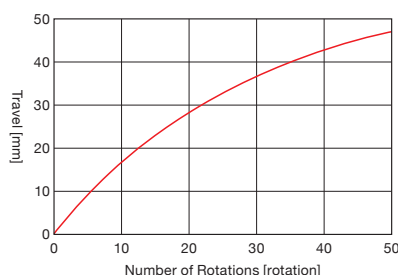
- Use the special platform (LJP) to mount larger samples.
 Reference E112

Travel Variation Per Adjustment Handle Rotation

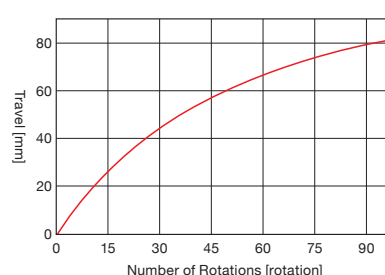
LJA-80133-M6/UU



LJA-10163-M6/UU



LJA-16223-M6/UU



Specifications

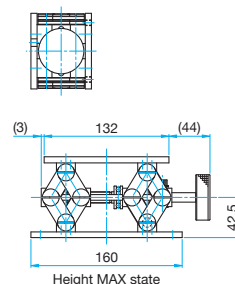
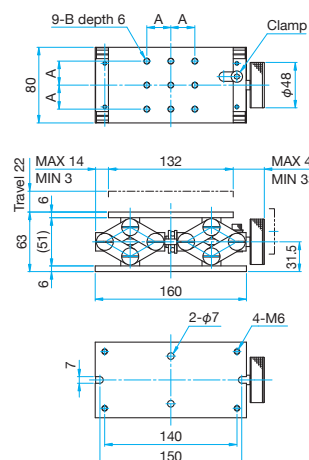
Part Number	METRIC	LJA-80133-M6	LJA-10163-M6	LJA-16223-M6
	INCH	LJA-80133UU	LJA-10163UU	LJA-16223UU
Table Size [mm]		80×132	100×160	160×220
Axes of Travel		Z axis		
Travel [mm]		22	40	70
Primary Material		Aluminum		
Finish		Black anodized		
Load Capacity [N]		196 (20Kgf)	245 (25Kgf)	294 (30Kgf)
Max. Moment Capacity	Pitch [N·m]	29.4	38	49
	Roll [N·m]	2.9	4	6
Parallelism [μm]		100	100	100
Weight [kg]		2.3	3.4	5.9



Outline Drawing

LJA-80133-M6/80133UU

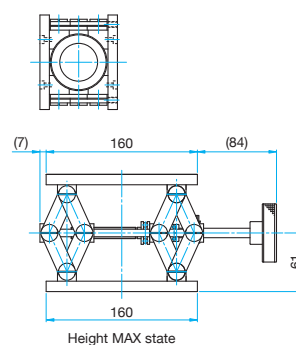
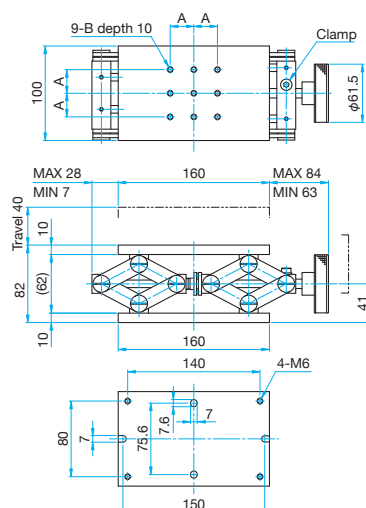
- Hexagonal socket head cap screw
 M6×12...4 screws,
 One 5mm hex wrench (M6)
 Hexagonal socket head cap screw
 1/4-20UNC×1/2...4 screws,
 One 5mm hex wrench (UU)



Part Number	A (mm)	B
LJA-80133-M6	25	M6 P1
LJA-80133UU	25.4	1/4-20UNC

LJA-10163-M6/10163UU

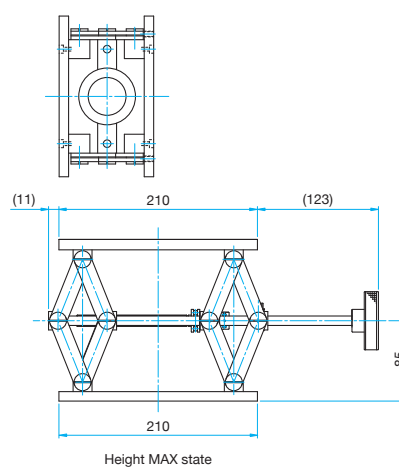
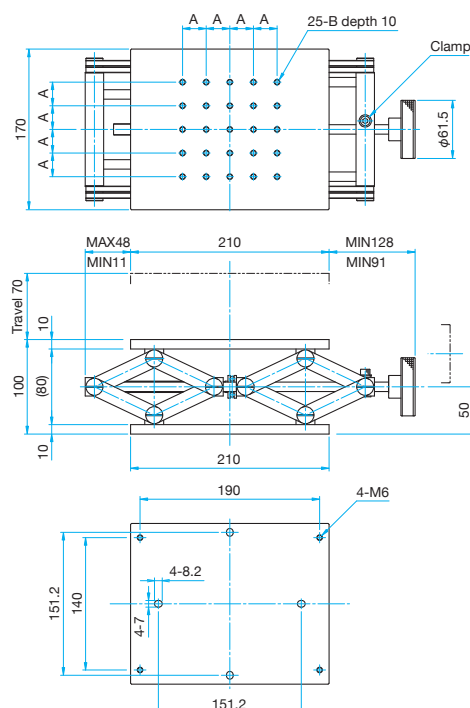
- Hexagonal socket head cap screw
 M6×12...4 screws,
 One 5mm hex wrench (M6)
 Hexagonal socket head cap screw
 1/4-20UNC×1/2...4 screws,
 One 5mm hex wrench (UU)



Part Number	A (mm)	B
LJA-10163-M6	25	M6 P1
LJA-10163UU	25.4	1/4-20UNC

LJA-16223-M6/16223UU

- Hexagonal socket head cap screw
 M6×12...4 screws,
 One 5mm hex wrench (M6)
 Hexagonal socket head cap screw
 1/4-20UNC×1/2...4 screws,
 One 5mm hex wrench (UU)



Part Number	A (mm)	B
LJA-16223-M6	25	M6 P1
LJA-16223UU	25.4	1/4-20UNC

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Others

- ☐ 15mm
- ☐ 25mm
- ☐ 40mm
- ☐ 60mm
- ☐ 65mm
- ☐ 80mm
- ☐ 100mm
- ☐ 120mm

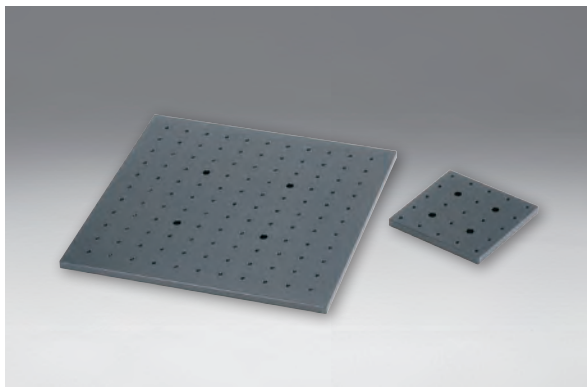
Others

Platform for Labjacks | LJP

RoHS

Platform for precision labjacks (LJ/LJA).

Larger samples can be mounted by changing the platform.



Guide

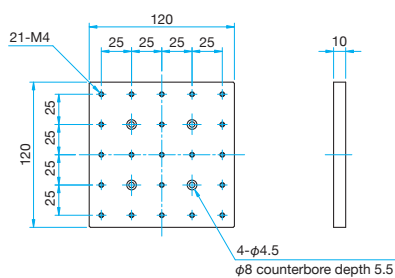
- We will accept production of sizes not listed in the catalog. Contact our International Sales Division for more information.
- Usable as a simplified optical baseplate for configuring a small optical system.
- Platforms with grips (OBC) that have M4 or M6 tapped holes (25mm matrix) are also available. [Reference](#) D032



Outline Drawing

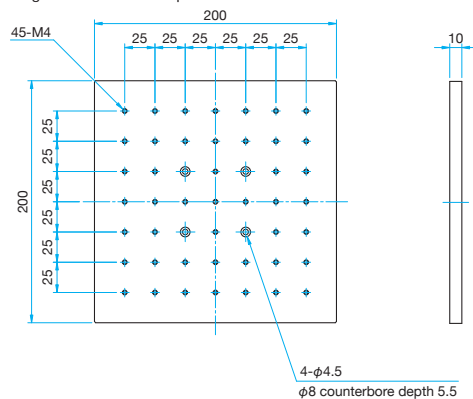
LJP-120

Hexagonal socket head cap screw M4×12...4 screws



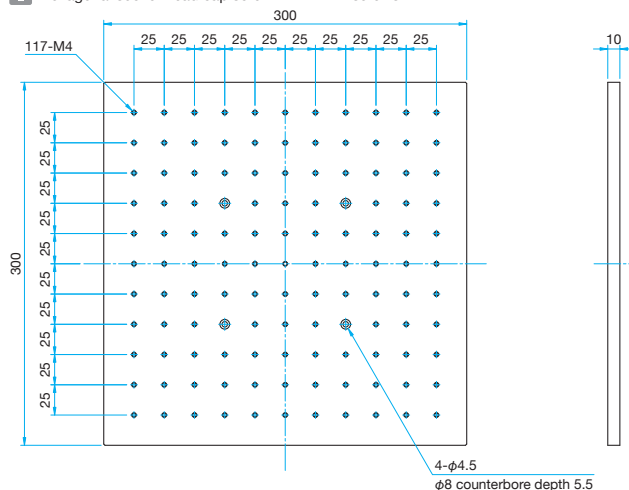
LJP-200

Hexagonal socket head cap screw M4×12...4 screws



LJP-300

Hexagonal socket head cap screw M4×12...4 screws



Specifications

Part Number	LJP-120	LJP-200	LJP-300
Size [mm]	120×120	200×200	300×300
Primary Material	Aluminum		
Finish	Black anodized		
Weight [kg]	0.4	1.1	2.4

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Others

15mm

25mm

40mm

60mm

65mm

80mm

100mm

120mm

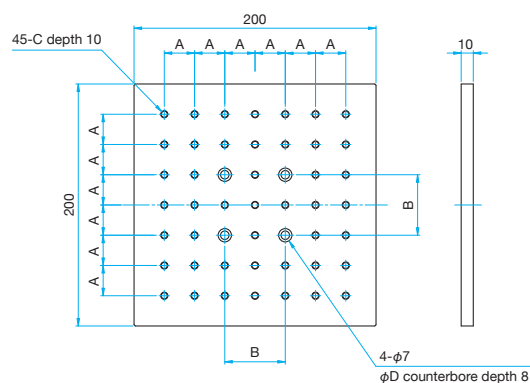
Others



Outline Drawing

LJP-200-M6/200UU

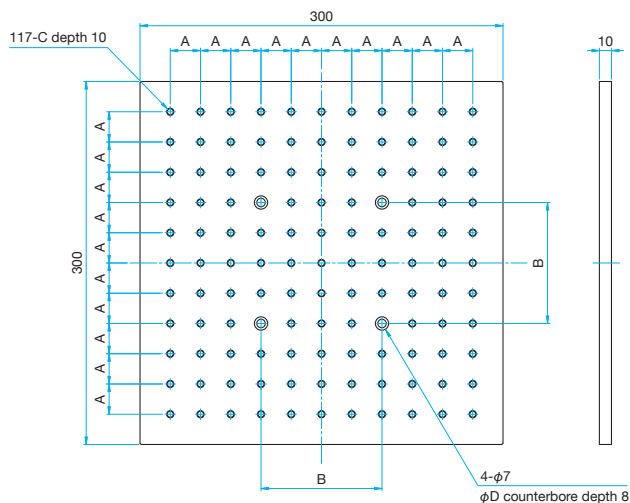
- Hexagonal socket head cap screw M6×10...4 screws (M6)
 Hexagonal socket head cap screw 1/4-20UNC×3/8...4 screws (UU)



Part Number	A (mm)	B (mm)	C	D (mm)
LJP-200-M6	25	50	M6 P1	11
LJP-200UU	25.4	50.8	1/4-20UNC	12

LJP-300-M6/300UU

- Hexagonal socket head cap screw M6×10...4 screws (M6)
 Hexagonal socket head cap screw 1/4-20UNC×3/8...4 screws (UU)



Part Number	A (mm)	B (mm)	C	D (mm)
LJP-300-M6	25	50	M6 P1	11
LJP-300UU	25.4	50.8	1/4-20UNC	12

Specifications			
Part Number	METRIC	LJP-200-M6	LJP-300-M6
	INCH	LJP-200UU	LJP-300UU
Size [mm]		200×200	300×300
Primary Material		Aluminum	
Finish		Black anodized	
Weight [kg]		1.1	2.4

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Others

☐ 15mm☐ 25mm☐ 40mm☐ 60mm☐ 65mm☐ 80mm☐ 100mm☐ 120mm

Others

Adjustable Spacer Kits for Labjacks

LJS

RoHS

Catalog Code W7056

Spacer kits for precision labjacks (LJ/LJA).

- A kit contains one plate (made of steel) and three different lengths of posts, 20, 40 and 80mm (four posts for each). Height can be adjusted by combining these posts (height can be added to 20, 40, 60, 80, 100, 120 and 140mm).
- Refer to the outline drawing regarding the connection diagram to the precision labjacks.



Guide

- We will accept production of sizes not listed in the catalog.
Contact our International Sales Division for more information.

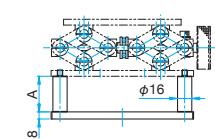
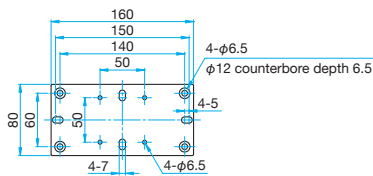
Connection Example



Outline Drawing

LJS-8016

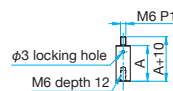
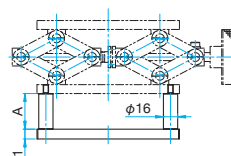
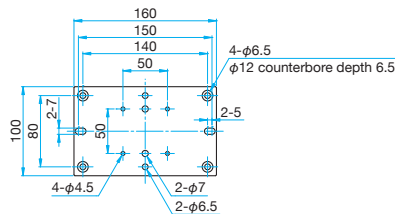
Hexagonal socket head cap screw
M6×12...4screws, One 5mm hex wrench



A [mm]
20
40
80

LJS-1016

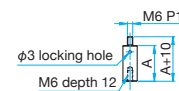
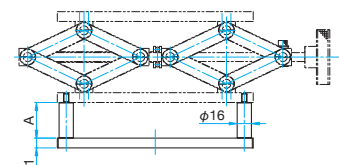
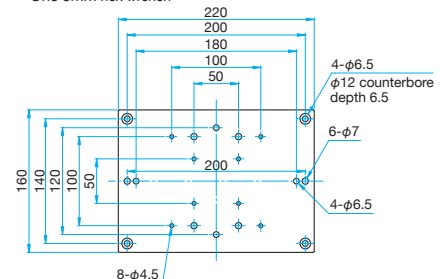
Hexagonal socket head cap screw
M6×12...4screws, One 5mm hex wrench



A [mm]
20
40
80

LJS-1622

Hexagonal socket head cap screw M6×12...4screws,
One 5mm hex wrench



A [mm]
20
40
80

Specifications

Part Number	LJS-8016	LJS-1016	LJS-1622
Compatible Labjack Part Number	LJ-80133 LJA-80133	LJ-10163 LJA-10163	LJ-16223 LJA-16223
Primary Material	Steel	Steel	Steel
Finish	Super black chrome	Super black chrome	Super black chrome
Weight [kg]	1.7	2.2	3.9

* There are mounting holes of 4-Φ4.5 also □100mm on LJS-1622.

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Others

□15mm

□25mm

□40mm

□60mm

□65mm

□80mm

□100mm

□120mm

Others

Using the jack screw method, this is a large scale Z-axis stage.



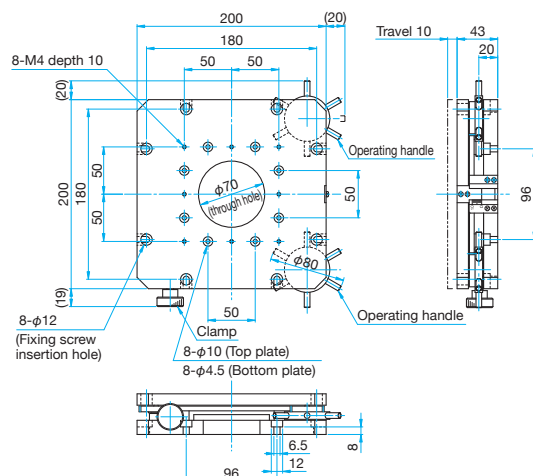
- By turning the handle on the side, the top surface of the stage will move up and down. Since the handle is interlocked, the stage surface will move when operating either one.
- The transmitted hole in the center of the stage remains always the through hole diameter unchanged even if the table is moved.



Outline Drawing

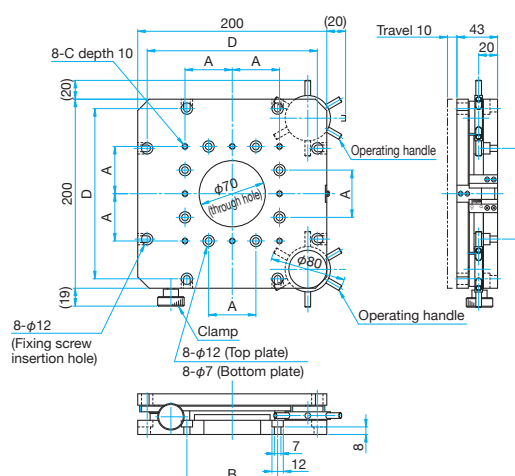
TSM-2003

Hexagonal socket head cap screw M6×15...8 screws, Flat washers



TSM-2003-M6/2003UU

Hexagonal socket head cap screw M6×15...8 screws, Flat washers (M6)
Hexagonal socket head cap screw 1/4-20UNC×5/8...8 screws (UU)



Part Number	A (mm)	B (mm)	C	D (mm)
TSM-2003-M6	50	96	M6 P1	180
TSM-2003UU	50.8	96.04	1/4-20UNC	177.8

Specifications

Part Number	METRIC	TSM-2003	TSM-2003-M6
	INCH	—	TSM-2003UU
Table Size [mm]		200×200	200×200
Axes of Travel		Z axis	
Travel [mm]		10	10
Lead of Actuator [mm/rotation]		1.0	1.0
Readable Resolution [mm]		1	1
Bearing type		Jack screw method	
Primary Material		Aluminum	
Finish		Black anodized	
Load Capacity [N]		490 (50.0kgf)	490 (50.0kgf)
Travel Accuracy	Straightness [μm]	200	200
Max. Moment Capacity	Pitch [N·m]	4.9	4.9
	Roll [N·m]	4.9	4.9
Moment Stiffness	Pitch [°/N·cm]	0.05	0.05
	Roll [°/N·cm]	0.05	0.05
Parallelism [μm]		150	150
Weight [kg]		5.0	5.0

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Others

□15mm

□25mm

□40mm

□60mm

□65mm

□80mm

□100mm

□120mm

Others