

[High Precision] Dovetail Cross Roller Stages

X-Axis High Load Capacity

Travel per Rotation	Small	Medium	Large
Stroke	Short	Medium	Long
Load Capacity	Light	Medium	Heavy

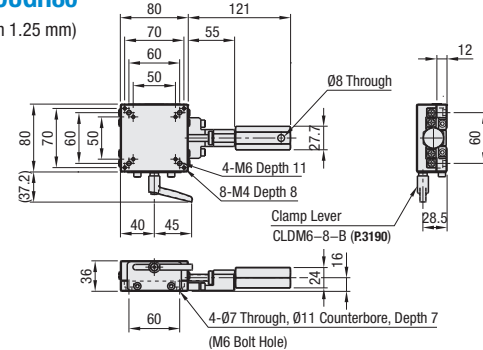
Features: Cross rollers larger than usual are used, and the stage top mounting holes are provided in M4, M6, and M8 sizes. The stage can position 40–120 kgf loads accurately.

X-Axis High Load Capacity

RoHS10

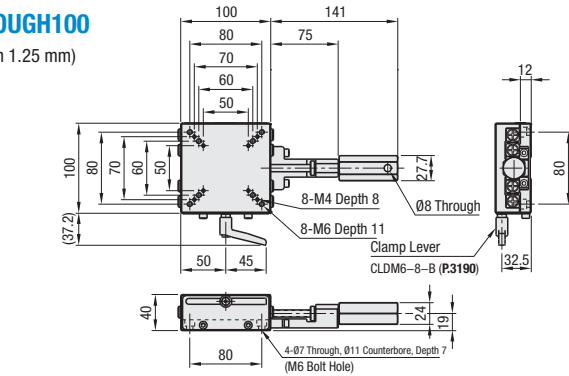
XTOUGH80

(Pitch 1.25 mm)



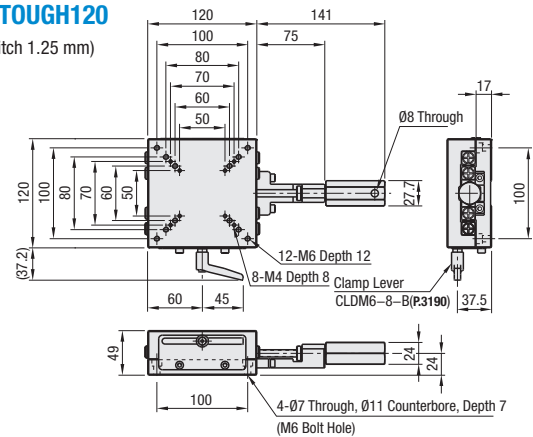
XTOUGH100

(Pitch 1.25 mm)



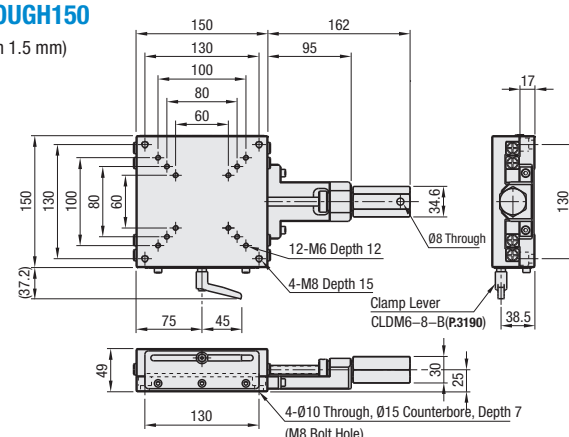
XTOUGH120

(Pitch 1.25 mm)



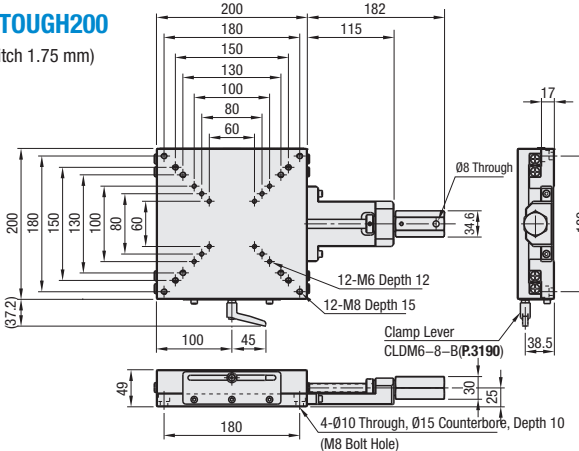
XTOUGH150

(Pitch 1.5 mm)



XTOUGH200

(Pitch 1.75 mm)



Material: (Main Body)1045 Carbon Steel or Equivalent
(Feed Screw)304 Stainless Steel
Surface Treatment: Electroless Nickel Plating

Part Number	Type	Stage (mm)	Travel Distance (mm)	Travel per Rotation (mm)	Horiz. Load Capacity (N)	Travel Accuracy				Moment Capacity (N·m)			Moment Rigidity (N/cm)			Parallelism	Weight (kg)	Accessory (4 pcs.) Type M-L
						Straightness	Parallelism	Pitching	Yawing	Pitching	Yawing	Rolling	Pitching	Yawing	Rolling			
80		80 x 80	±20		392					30.1	25.1	23.0	0.228	0.139	0.059		1.78	SCB6-16
100		100 x 100	±25	1.25	588	6 μm	15 μm	50"	30"	70.3	58.6	56.0	0.033	0.015	0.021	50 μm	2.98	SCB6-20
120		120 x 120	±30		784					142.9	119.1	120.0	0.024	0.014	0.015		5.18	SCB6-20
150		150 x 150	±40	1.5	980	10 μm	20 μm	80"	50"	252.9	210.7	219.9	0.009	0.008	0.003		8.48	SCB8-25
200		200 x 200	±50	1.75	1176					527.9	439.9	479.8	0.004	0.002	0.003		13.82	SCB8-25

Part Number Example: XTOUGH150

[High Precision] Linear Ball Guides

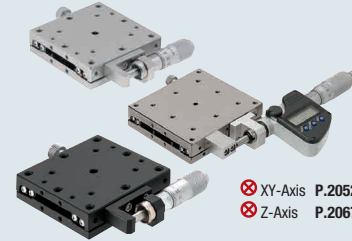
X-Axis Selectable Feed Mechanism

Travel per Rotation	Small	Medium	Large
Stroke	Short	Medium	Long
Load Capacity	Light	Medium	Heavy

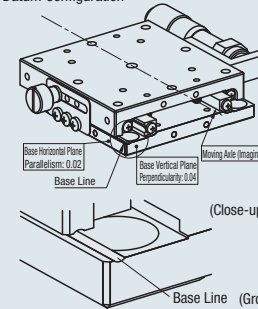
Features: Highly accurate, rigid, and economical stages. If the feed scale reading is not needed, further economy can be achieved by the Feed Screw types.

Ⓢ The XSGK type has a fine feed 0.25 pitch.

X-Axis Stages



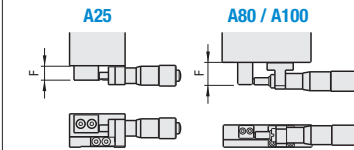
Ⓢ Standard Datum Configuration



Ⓢ MISUMI's Linear Ball Stages have Parallel and Orthogonal datums in relation to the motion axis. The Datums are as illustrated.

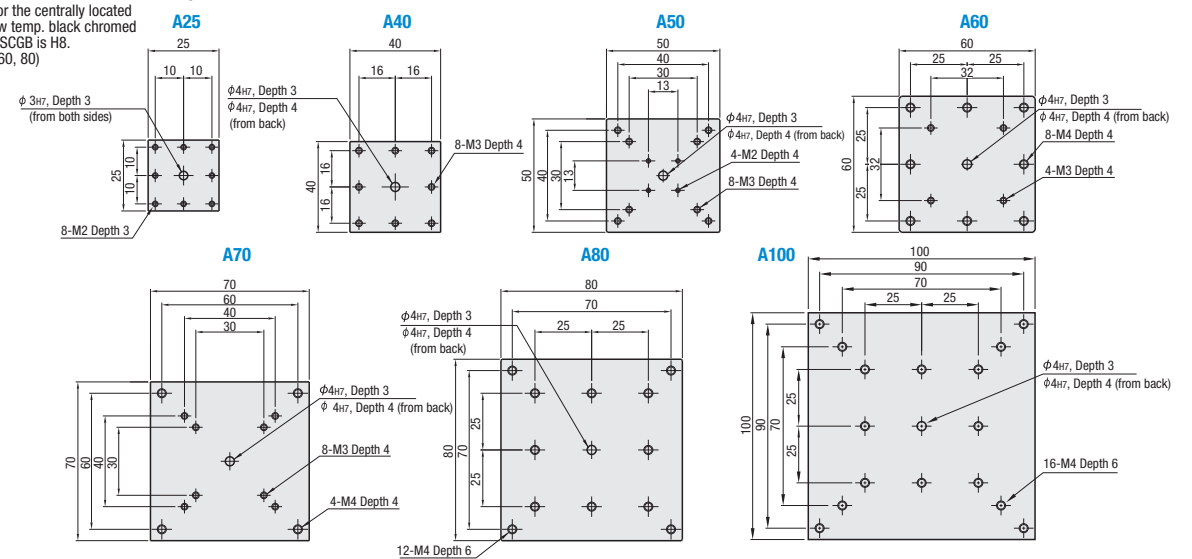
Shapes of Feed Brackets

Ⓢ For A25, 80, and 100, the feed brackets have a different shape.



Mounting Hole Dimensions of the Top Table

* Tolerance for the centrally located bores for low temp. black chromed XSGB and XSCGB is H8. (A=25, 40, 60, 80)



Type	Main Body		Ball		Spring Material	Micrometer Head Bracket		Tip Holder	
	Material	Surface Treatment	Material	Hardness		Material	Surface Treatment	Material	Surface Treatment
XSG	440C Stainless Steel	Electroless Nickel Plating	440C Stainless Steel	58 HRC~	304 Stainless Steel PB	5052 Aluminum Alloy	Clear Anodize	303 Stainless Steel	Low Temp. Black Chrome Plating
XSCG									
XSBG									
XSDG									
XSKG									
XSCGB									

Ⓢ For Micrometer Head & Feed Screw material, see P.2102-2103