

[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

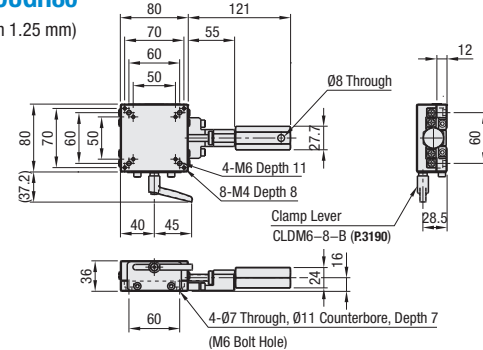
Features: Cross rollers larger than usual are used, and the stage top mounting holes are provided in M4, M6, and M8 sizes. The stage can position 40–120 kgf loads accurately.

X-Axis High Load Capacity

RoHS10

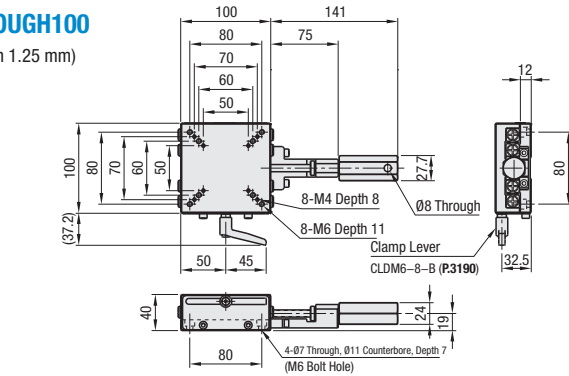
XTOUGH80

(Pitch 1.25 mm)



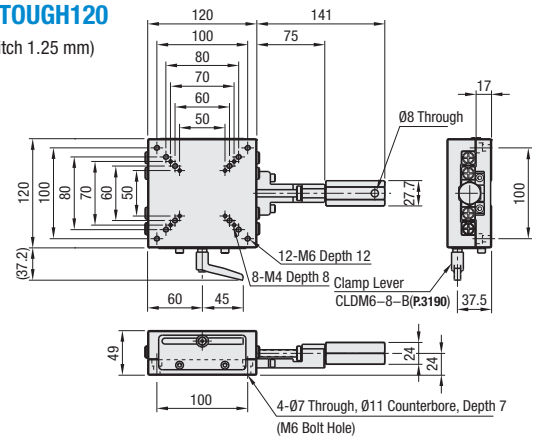
XTOUGH100

(Pitch 1.25 mm)



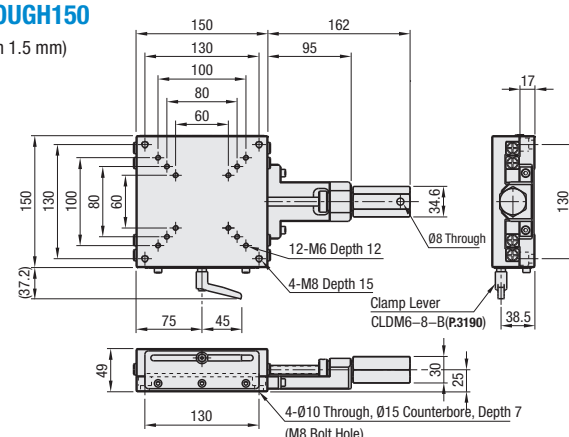
XTOUGH120

(Pitch 1.25 mm)



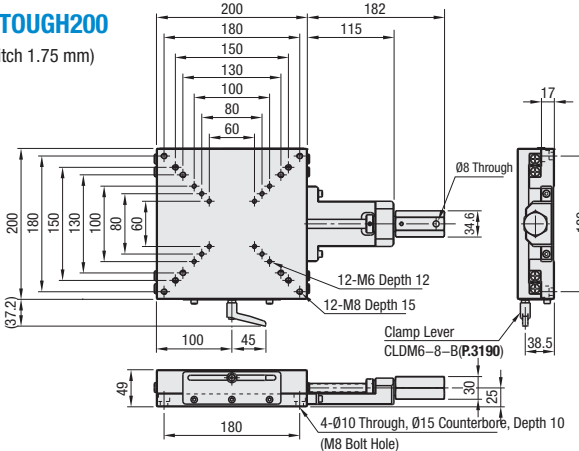
XTOUGH150

(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			
XTOUGH	80	80 x 80	±20	392					30.1	25.1	23.0	0.228	0.139	0.059	50 μm	1.78	SCB6-16
	100	100 x 100	±25	588	6 μm	15 μm	50"	30"	70.3	58.6	56.0	0.033	0.015	0.021			
	120	120 x 120	±30	784					142.9	119.1	120.0	0.024	0.014	0.015			
	150	150 x 150	±40	980	10 μm	20 μm	80"	50"	252.9	210.7	219.9	0.009	0.008	0.003			
	200	200 x 200	±50	1176					527.9	439.9	479.8	0.004	0.002	0.003	8.48	SCB8-25	

Part Number Example: XTOUGH150

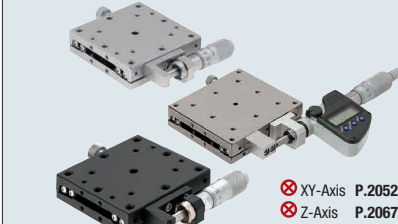
[High Precision] Linear Ball Guides

X-Axis Selectable Feed Mechanism

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

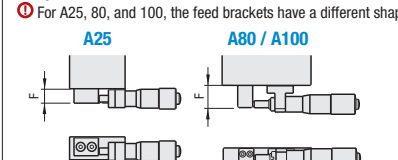
Features: Highly accurate, rigid, and economical stages. If the feed scale reading is not needed, further economy can be achieved by the Feed Screw types.
 Ⓢ The XSGK type has a fine feed 0.25 pitch.

X-Axis Stages



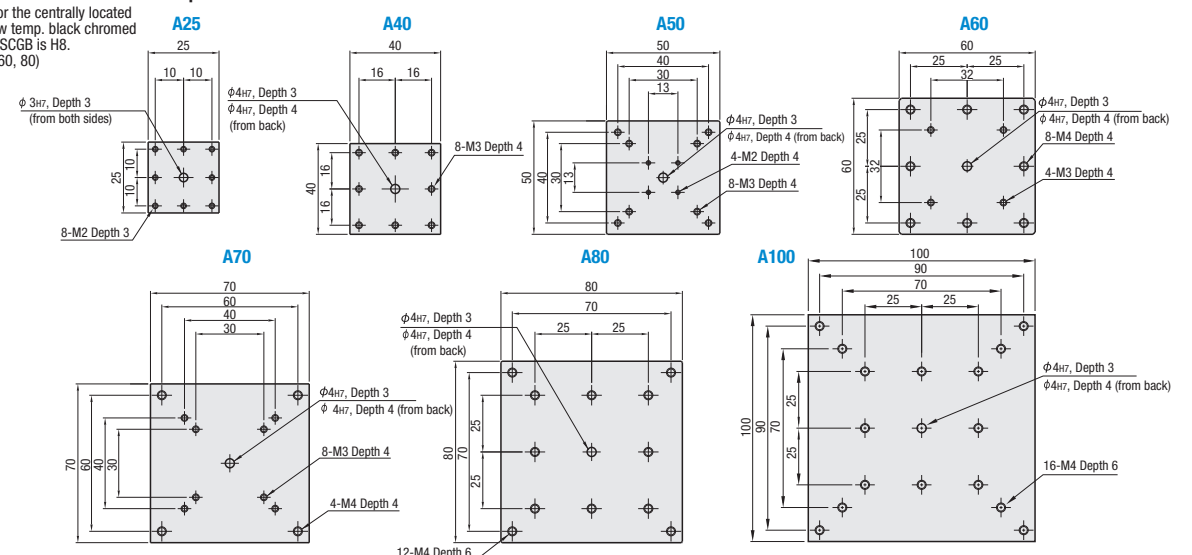
Standard Datum Configuration
 Ⓢ MISUMI's Linear Ball Stages have Parallel and Orthogonal datums in relation to the motion axis. The Datums are as illustrated.

Shapes of Feed Brackets



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