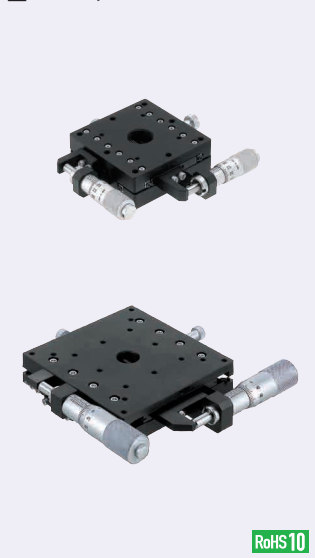


[High Precision] Cross Roller

Low Profile / Through Hole

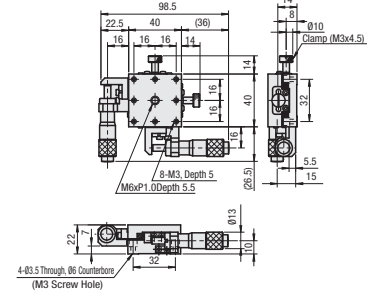
■ **Features:** Extra low profile achieved by XY-Axis unitized construction in comparison to YYPG (P.1943). 28mm height or less and no need for orthogonal aligning.

■ XY-Axis, Low Profile

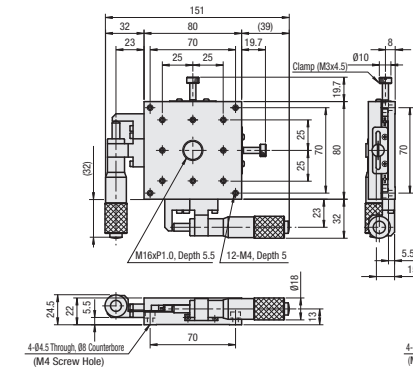


M Material:	Aluminum Alloy		
	S Surface Treatment: Black Anodize		
	A Accessory		
	XYSPG	40 60 80 100	SCB3-10 SCB4-10 4 pcs.

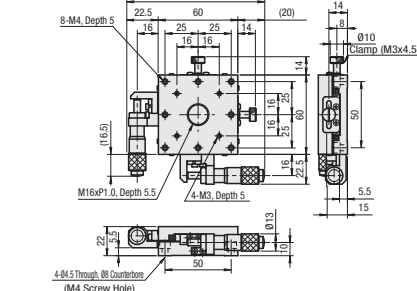
XYSPG40



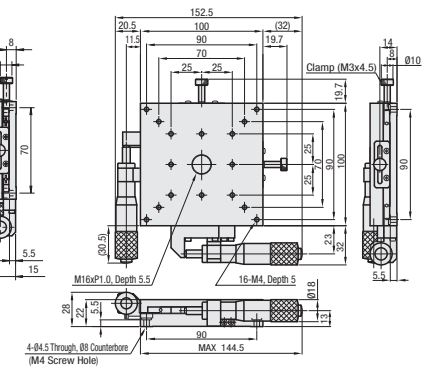
XYSPG80



XYSPG60

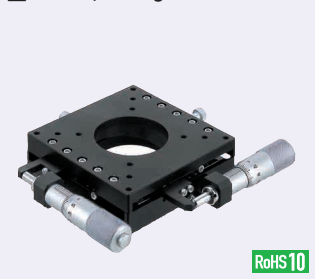


XYSPG100



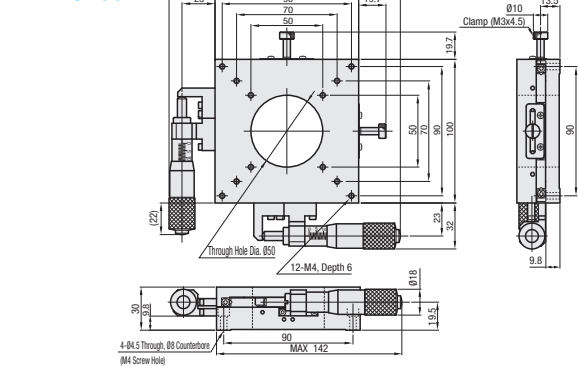
■ **Features:** There is a Ø50 through hole in the stage center. Useful for illuminating from directly below.

■ XY-Axis, Through Hole



M Material:	Aluminum Alloy		
	S Surface Treatment: Black Anodize		
	A Accessory: SCB4-14 (4 pcs.)		

XYPPG100



⚙️ Standard Stages Similar Products (available for limited sizes only): XYCRSC (P.1944)

Part Number	Type	No.	Stage Surface (mm)	Travel Distance (mm)	Load Capacity (N)	Travel Accuracy				Moment Load Capacity (N · m)			Moment Rigidity (°/N · cm)			Parallelism	Weight (kg)	Unit Price
						Straightness	Motion Parallelism	Pitching	Yawing	Pitching	Yawing	Rolling	Pitching	Yawing	Rolling			
XYSPG		40	40x40	±6.5	9.8	3μm	20μm	40°	20°	0.7	0.8	0.7	0.57	0.50	0.64	50μm	0.2	
		60	60x60		29.4					2.3	1.9	2.3	0.19	0.13	0.15		0.4	
		80	80x80	±12.5	39.2					5.1	4.2	5.1	0.13	0.13	0.11		0.7	
		100	100x100							5.1	4.2	5.1	0.08	0.10	0.08		1.1	
XYPPG		100	100x100	±12.5	63.7	3μm	20μm	25°	15°	4.6	3.9	4.6	0.07	0.08	0.10	50μm	1.0	

⚙️ Micrometer Head Resolution: 10μm/division

Ordering Example	Part Number
	XYSPG80

Alterations	Part Number	- (CR, A)

Alterations	Micrometer Position	
	Side Mount - Right / Left Reversed	Center
Spec.		
Code	CR	A

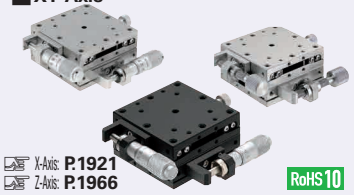
- ⚙️ Mounting dimensions of micrometer head, feed screw and clamp are different from those of standard products. See the CAD data for details.
- ⚙️ Knob Cover HDCVR13 (Sold Separately): Ø13 micrometer knob can be increased in diameter by installing the cover. **P2004**
- ⚙️ Extension Cover HDEXT13 (Sold Separately): Ø13 micrometer head knob can be extended. **P2004**

[High Precision] Linear Ball

Micrometer Head / Feed Screw

■ **Features:** Highly accurate, rigid, and economical stages. Even an XY stack is only 40mm high or less, and orthogonality alignment is not needed.

■ XY-Axis

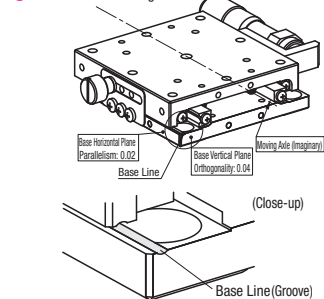


⚙️ X-Axis: P.1921

⚙️ Z-Axis: P.1966

RoHS 10

⚙️ Standard Datum Configuration



⚙️ MISUMI's Linear Ball Guide Stages have parallel and orthogonal datum in relation to the motion axis. The data are as illustrated.

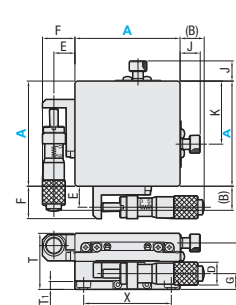
■ Micrometer Head

XYSG

(25≤A≤100)

XYSGB (LTBC Plating)

(25≤A≤80)



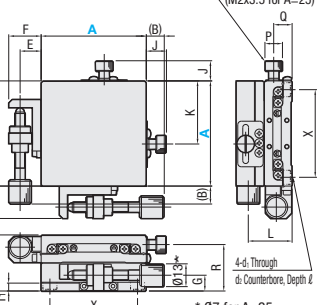
■ Feed Screw (Pitch 0.5)

XYSCG

(25≤A≤100)

XYSCGB (LTBC Plating)

(25≤A≤80)



Type	Main Body	Ball	Spring	Micrometer Head Bracket	Tip Holder
XYSG (Micrometer)	Material: EN 1.4125 Equiv.	Material: EN 1.4125 Equiv.	Material: SUS304WPB	Material: EN AW-5052 Equiv.	Material: EN 1.4305 Equiv.
XYSCG (Feed Screw)	Surface Treatment: Electroless Nickel Plating	Surface Treatment: 58HRC-	Surface Treatment: 5052 Equiv.	Surface Treatment: Clear Anodize	Surface Treatment: Black Anodize
XYSGB (Micrometer, LTBC Plating)	Surface Treatment: LTBC Plating	Surface Treatment: 58HRC-	Surface Treatment: 5052 Equiv.	Surface Treatment: Clear Anodize	Surface Treatment: Black Anodize
XYSCGB (Feed Screw, LTBC Plating)	Surface Treatment: LTBC Plating	Surface Treatment: 58HRC-	Surface Treatment: 5052 Equiv.	Surface Treatment: Clear Anodize	Surface Treatment: Black Anodize

⚙️ For Micrometer Head and Feed Screw materials, see P.2005.

⚙️ For top surface mounting dimensions, see Linear Ball Slide X-Axis Stages on P.1921. ⚙️ See the CAD data for details.

■ Micrometer Head (XYSG, XYSGB) / Feed Screw (XYSCG, XYSCGB)

Part Number		Top View										Front View					Side View							Accessory (4 pcs.)
Type	A	(B)		Travel Distance (mm)	E	F	J	K	D	G	R	T	T ₁	P	Q	L	X	d ₁	d ₂	ℓ	Type M-L			
		Micrometer	Feed Screw																					
XYSG	25*	25	11	±3.2	7	9	6.8	15	9.3	7	20.5	24	3.7	6	8.5	19	20	2.5	4.2	2.5	SCB2-4			
	40*	23.5	20																			26	8.9	26.5
XYSCG	50	18.5	15	±6.5	12	18.5	11.3	31	13	10	29.5	36	6	10	11.5	28	60	4.5	8	4	SCB4-6			
XYSCB	60*	14	10.3																			36	5	70
(* only)	70	14.5	10.8					46.5									50	8	4.5	SCB4-6				
XYSCGB	80*	43.5	10	±12.5*2	17	22*3		55	18	10.8	34.5	40	6.5			14.5	30.8	70	8	5.3	SCB4-6			
	(* only)	100	28.5																			-5*1	67.5	90

*1. Ends of feed screw knob are at 5mm inside of the carriage edges for XYSCG and XYSCGB. *2. Stroke of XYSCG80 and 100 is ±6.5mm. *3. When dimension A of Feed Screw Type XYSCG and XYSCGB are 80 or 100, F will be 20.

• Performance

Part Number	Type	A	Stage Surface (mm)	Horizontal Load Capacity (N)	Travel Accuracy			Moment Load Capacity (N · m)			Moment Rigidity (°/N · cm)			Parallelism	Weight (kg)	Unit Price			
					Straightness	Motion Parallelism	Pitching	Yawing	Pitching	Yawing	Pitching	Yawing	Rolling			XYSG	XYSCG	XYSGB	XYSCGB
XYSG	XYSG	25*	25x25	38.2	3μm	10μm	30°	25°	2.0	2.0	2.0	3.00	2.20	3.00	0.14				
		40*	40x40	95.1	1μm*	12μm	25°	15°	5.0	5.0	5.0	0.63	0.70	0.63	0.46				
		50	50x50	144.1					6.0	6.8	6.0	0.24	0.28	0.24	0.56				
		60*	60x60	192.1					9.0	10.0	9.0	0.13	0.16	0.13	0.80				
		70	70x70	219.5					12.9	13.8	12.9	0.09	0.10	0.09	1.16				
		80*	80x80	255.8					17.7	18.2	17.7	0.06	0.08	0.06	1.80				
XYSCGB	XYSCGB	100	100x100	329.6	3μm	15μm			30.7	31.8	30.7	0.03	0.04	0.03	2.66				

⚙️ XYSG, XYSGB Micrometer Head Resolution: 10μm/division *4. XYSGB, XYSCGB40 and 60 straightness is 3μm.

Ordering Example	Part Number
	XYSG40 XYSCGB60

- ⚙️ Knob Cover HDCVR13 (Sold Separately): Ø13 micrometer head knobs can be increased in diameter by installing the cover. **P2004**
- ⚙️ Extension Cover HDEXT13 (Sold Separately): Feed knob of Ø13 micrometer head and feed screw can be extended. **P2004**

Alterations	Part Number	- (CR, A, H, P, MN)

Alterations	Position of Micrometer Head and Feed Screw		Reinforced Clamp		No Micrometer Head
	Side Mount - Right / Left Reversed	Center	Disc Clamp	Opposed Clamp	No Micrometer Head
Spec.					
Code	CR	A	H	P	MN

- ⚙️ For 25 Square Opposed Clamp, the bracket material is EN 1.4305 Equiv. ⚙️ Standard Stages Similar Products: XYLBS (P.1942)
- ⚙️ When Position Change Alteration is selected, mounting dimensions of micrometer head, feed screw and clamp are different from those of standard products. See the CAD data for details.
- ⚙️ For micrometer head or feed screw mounted in positions other than shown below, see "Specification Selectable Type" (P.1989).