

[Standard] Z-Axis Cross Roller

[High Precision] Z-Axis Cross Roller

Points on Similar Product Comparison | Travel Accuracy (Straightness) 30µm

P.1994

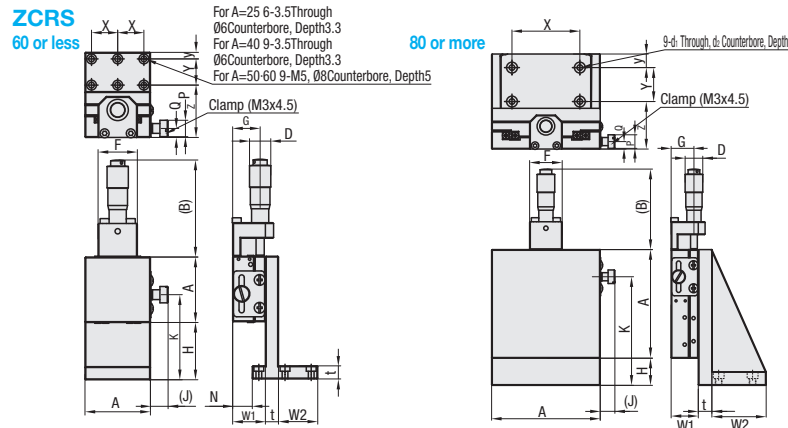
Features: Economical stages with a micrometer head capable of 0.01mm resolution adjustments.

Z-Axis

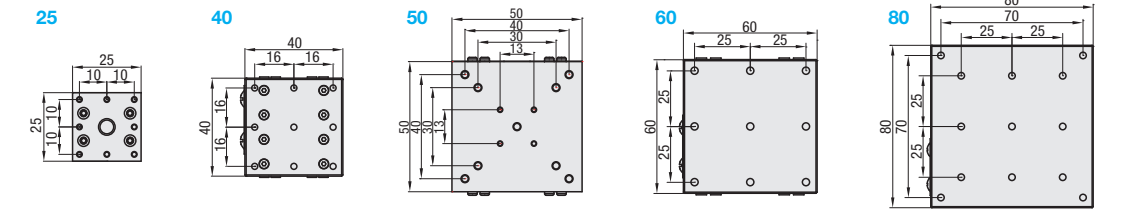


X-Axis P.1917
Y-Axis P.1942

RoHS 10



Mounting Hole Dimensions of the Top Table



For mounting hole dimensions of the Cross Roller Stage A90, 100, 120 top table, see P.1917.

80, 90, 100, 120 have different plate side shapes. See CAD data for details.

M Material: Aluminum Alloy
S Surface Treatment: Black Anodize

Part Number	Front View				Side View								Top View					
	A	(B)	H	Travel Distance (mm)	F	K	(J)	D	G	N	W ₁	W ₂	t	P	Q	X	Y	y
25	41	35	±3.2	13	45	(6.8)	9.5	12.5	7	15	24	8	6	4.5	17	16	4	
40	59	35	±6.5	24	52	(10.8)	13	16.8	12	20	24	8	10	5.5	16	16	4	
50	59	30		24	61	(10.8)	13	16.8	10	20	30	10	10	5.5	20	20	5	
60	59	25	24	64	(10.8)	13	16.8	10	20	40	10	10	5.5	25	25	5		
80	59	20	24	80	(10.8)	13	16.8	-	20	40	10	10	5.5	50	25	10		
90	80	20	±12.5	24	84	(10.8)	13	16.8	-	20	50	10	10	5.5	50	25	15	
100	80	20		24	80	(10.8)	13	16.8	-	20	50	10	10	5.5	50	25	10	
120	155.5	30	±25	24	101	(10.8)	18	16.2	-	20	50	10	10	5.5	50	25	10	

Performance

Part Number	Stage Surface (mm)	Load Capacity (N)	Travel Accuracy Straightness	Moment Load Capacity (N·m)			Moment Rigidity (1/N·cm)			Weight (kg)	Unit Price
				Pitching	Yawing	Rolling	Pitching	Yawing	Rolling		
25	25x25	4.9	30µm	1.1	0.8	0.4	3.03	2.85	1.8	0.06	
40	40x40	9.8		2.7	2.2	2.0	0.38	0.42	0.28	0.24	
50	50x50	14.7		3.5	3.0	3.3	0.2	0.22	0.12	0.34	
60	60x60	19.6		5.2	4.3	5.5	0.12	0.11	0.07	0.46	
80	80x80	49		19.2	15.1	17.3	0.05	0.05	0.04	0.76	
90	90x90			25.0	20.0	22.0	0.05	0.05	0.04	1.03	
100	100x100			36.0	30.0	33.0	0.06	0.07	0.05	1.2	
120	120x120			57.2	44.7	66.7	0.03	0.02	0.01	1.79	

Max. Holding Force (Ref.) will vary depending on the tightening torque variations. Ensure adequate safety margins for design.
Micrometer Head Resolution: 10µm/division

Ordering Example: Model (Type, A) ZCRS40

Features: Cross Roller Z-Axis Stages made of lightweight aluminum alloy.

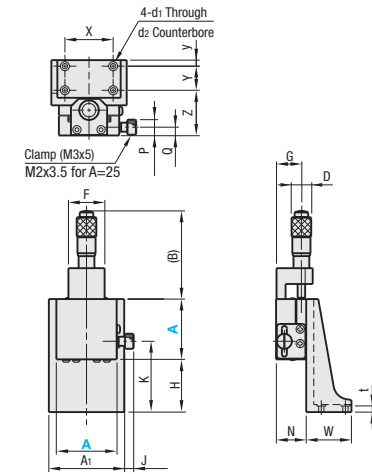
Z-Axis



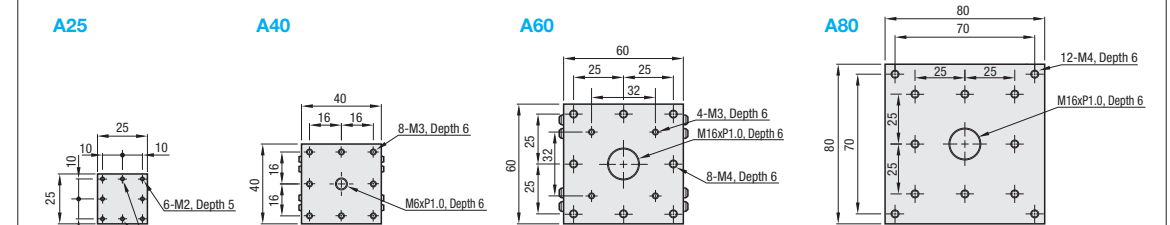
X-Axis P.1918
Y-Axis P.1943

RoHS 10

ZPG



Mounting Hole Dimensions of the Top Table



See the CAD data for detailed dimensions. * The depth will be short due to the stage shape.

M Material: Aluminum Alloy
S Surface Treatment: Black Anodize

Standard Stages Similar Products (available for limited sizes only): ZCRS (P.1967)

Micrometer Head (ZPG)

Part Number	Front View				Side View								Top View				Accessory (4 pcs.)						
	Type	A	A ₁	H	(B)	Travel Distance (mm)	F	K	J	D	G	N	W	t	P	Q		X	Y	y	Z	d ₁	d ₂
ZPG	25	25	12.5	37.0	±3.2	11	22.5	6.8	9.3	12.5	15	20	5	6	4.5	20	10	2.5	22.5	2.5	-	-	SCB2-8
	40	50	35.0	58.5	±6.5	24	47.0	6.3	13.0	16.8	20	30	4	10	5.5	32	16	4.0	30.0	3.5	6	-	SCB3-8
	60	70	20.0	58.5	±6.5	24	37.5	6.3	13.0	16.8	20	45	7	10	5.5	50	25	5.0	35.0	4.5	8	-	SCB4-12
	80	80	20.0	96.0	±12.5	24	45.0	11.3	18.0	16.5	20	45	7	10	5.5	50	25	5.0	35.0	4.5	8	-	SCB4-12

Performance

Part Number	Stage Surface (mm)	Load Capacity (N)	Travel Accuracy		Moment Load Capacity (N·m)			Moment Rigidity (1/N·cm)			Weight (kg)	Unit Price	
			Straightness	Pitching Yawing	Pitching	Yawing	Rolling	Pitching	Yawing	Rolling			
ZPG	25	25x25	4.9	3µm	25"	15"	1.1	0.8	0.4	3.03	2.85	1.80	0.06
	40	40x40	9.8				2.7	2.2	2.0	0.38	0.42	0.28	0.20
	60	60x60	19.6				5.2	4.3	5.5	0.12	0.11	0.07	0.45
	80	80x80	49.0				19.2	15.1	17.3	0.05	0.05	0.04	0.80

Micrometer Head Resolution: 10µm/division

Ordering Example: Part Number ZPG60

Alterations: Part Number - (C, CU) ZPG60 - CU Express service is not available.

Alterations	Micrometer Head Position	
	Side Up	Side Down
Spec.	A	H
	25	12.5
	40	35
	60	20
Code	C	CU

Mounting dimensions of micrometer heads and clamps are different from those of standard products. Bracket shapes differ depending on the sizes. See the CAD data for detailed dimensions.
Knob Cover HDCVR13 (Sold Separately): Ø13 micrometer knob can be increased in diameter by installing the cover. P.2004
Extension Cover HDEXT13 (Sold Separately): Ø13 micrometer head knob can be extended. P.2004