

[Standard] Cross Roller

X-Axis Stages

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

X-Axis Stages

XCERS40

A25 25x25, 8-M2 Depth 4

A40 40x40, 9-M3 Depth 6

A50 50x50, 4-M2 Depth 4, 13-M3 Depth 6

A60 60x60, 9-M4 Depth 6

A80 80x80, 13-M4 Depth 6

A90 90x90, 17-M4 Depth 6

A100 100x100, 21-M4 Depth 6

A120 120x120, 25-M4 Depth 6

Material: Aluminum Alloy
Surface Treatment: Black Anodize

Ⓢ The Feeding Bracket for A25 is unique.
Ⓢ Dimensional Details can be confirmed with CAD data provided on the website.

Ⓢ For A120, the micrometer head tip shape is unique.

Part Number	Top View			Front View			Side View									
	Type	A	(B)	Travel Distance (mm)	E	F	(J)	D	G	T	P	Q	X	d ₁	d ₂	ℓ
XCERS	25	29	29	±3.2	7	11.8	(6.8)	9.5	9.3	15	6	10.5	20	2.4	4.2	2.5
	40	26	26	±6.5	8	19	(10.8)	13	13	20	10	14.5	32	3.4	6	3.3
	50	23	23		8	19	(10.8)	13	13	20	10	14.5	40	3.4	6	3.5
	60	21	21		8	19	(10.8)	13	13	20	10	14.5	50	4.5	8	4.4
	50	22	22	±12.5	8	19	(10.8)	13	13	20	10	14.5	70	4.5	8	4.4
	90	34.8	34.8		8	19	(10.8)	13	13	20	10	14.5	80	4.5	8	5.3
	100	20.8	20.8		8	19	(10.8)	13	13	20	10	14.5	90	4.5	8	5.3
	120	88	88	±25	13.5	26	(10.8)	19.1	11	20	10	14.5	100	4.5	8	5.3

X-Axis Stages Ⓢ High Precision Stage Product: XPG P.2041

A	Stage Surface (mm)	Load Bearing Capacity		Max. Holding Force (N) (Ref.)	Travel Accuracy		Moment Load Capacity (N * m)			Moment Rigidity (N / N * cm)			Parallelism	Weight (kg)
		Horizontal	Vertical		Straightness	Motion Parallelism	Pitching	Yawing	Rolling	Pitching	Yawing	Rolling		
25	20 x 25	9.8 (14.7)	4.9 (14.7)	60	30 μm	30 μm	1.1	0.8	0.4	3.03	2.85	1.80	50 μm	0.04
40	40 x 40	19.6 (49)	9.8 (49)				2.7	2.2	2.0	0.38	0.42	0.28		0.14
50	50 x 50	29.4 (127.5)	14.7 (49)				3.5	3.0	3.3	0.20	0.22	0.12		0.18
60	60 x 60	49 (196)	19.6 (49)				5.2	4.3	5.5	0.12	0.11	0.07		0.25
80	80 x 80	98 (392)	49 (49)	70	30 μm	30 μm	19.2	15.1	17.3	0.05	0.05	0.04	60 μm	0.39
90	90 x 90	117.6 (441)					25.0	20.0	22.0	0.05	0.05	0.04		0.49
100	100 x 100	147 (490)					36.0	30.0	33.0	0.06	0.07	0.05		0.58
120	120 x 120	196 (588)					57.2	44.7	66.7	0.03	0.02	0.01		0.95

- Ⓢ Max. Holding Force (Ref.) will vary depending on the tightening torque variations. Ensure adequate safety margins for design.
- Ⓢ Micrometer Head Resolution: 10 μm/division
- Ⓢ Knob Cover HDCVR13 (Sold Separately): Ø13 micrometer knob diameter can be increased by installing the cover. P.2035
- Ⓢ Extension Cover HDEXT13 (Sold Separately): Ø13 micrometer head or feed screw knobs can be extended by installing the cover. P.2035
- Ⓢ Travel per micrometer knob rotation is 0.5mm

Part Number Example: **XCERS60**

Part Number Alterations

Part Number - (CR, A, etc.)

XCERS40 - CR
XCERS60 - AR

Alteration	Micrometer Head Position				
	Side Mount-Right / Left Reversed	Center	Center Mount, Right / Left Reversed	Center Mount, Top / Bottom Reversed	Center Mount, Right / Left & Top / Bottom Reversed
Spec.					
Code	CR	A	AR	AZ	AZR

[Standard] Cross Roller

XY-Axis

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

XY-Axis

YCERS

Material: Aluminum Alloy
Surface Treatment: Black Anodize

Ⓢ When A=25, the feeding bracket is unique.

Ⓢ When A=120, the micrometer head tip shape is unique.

Ⓢ For High Precision Stages (XYPG), see P.2056
Ⓢ The moment stiffness is a referential value.

Part Number	Top View			Front View						Side View								
	Type	A	(B)	Travel Distance (mm)	E	F	(J)	D	G	H	L	T	P	Q	X	d ₁	d ₂	ℓ
YCERS	25	29	29	±3.2	7	11.8	(6.8)	9.5	9.3	24.3	24.3	30	6	10.5	20	2.4	4.2	2.5
	40	26	26	±6.5	8	19	(10.8)	13	13	34.5	33	40	10	14.5	32	3.4	6	3.3
	50	23	23		8	19	(10.8)	13	13	34.5	33	40	10	14.5	40	3.4	6	3.5
	60	21	21		8	19	(10.8)	13	13	34.5	33	40	10	14.5	50	4.5	8	4.4
	50	22	22	±12.5	8	19	(10.8)	13	13	34.5	33	40	10	14.5	70	4.5	8	4.4
	90	34.8	34.8		8	19	(10.8)	13	13	34.5	33	40	10	14.5	80	4.5	8	5.3
	100	20.8	20.8		8	19	(10.8)	13	13	34.5	33	40	10	14.5	90	4.5	8	5.3
	120	88	88	±25	13.5	26	(10.8)	19.1	11	34.5	31	40	10	14.5	100	4.5	8	5.3

XY-Axis Stages Ⓢ High Precision Stage Product: XYPG P.2056

A	Stage Surface (mm)	Horizontal Load Capacity	Travel Accuracy		Moment Load Capacity (N * m)			Moment Rigidity (N / N * cm)			Parallelism	Weight (kg)
			Straightness	Motion Parallelism	Pitching	Yawing	Rolling	Pitching	Yawing	Rolling		
25	20 x 25	9.8 (14.7)	30 μm	30 μm	0.4	0.8	0.4	4.83	5.70	4.83	100 μm	0.09
40	40 x 40	17.6 (49)			2.0	2.2	2.0	0.66	0.84	0.66		0.28
50	50 x 50	28 (127.5)			3.4	3.0	3.4	0.35	0.4	0.35		0.36
60	60 x 60	44.1 (196)			5.2	4.3	5.2	0.19	0.22	0.19		0.48
80	80 x 80	93.1 (392)			17.3	15.1	17.3	0.09	0.10	0.09	0.77	
90	90 x 90	110 (441)			22.0	20.0	22.0	0.09	0.10	0.09	1.00	
100	100 x 100	140 (490)			33.0	30.0	33.0	0.11	0.14	0.11	1.20	
120	120 x 120	180 (588)			57.2	44.7	57.2	0.04	0.04	0.04	1.91	

- Ⓢ Micrometer head min. reading: 10 μm/division.
- Ⓢ Knob cover HDCVR13 (Sold separately): Increases knob diameter by putting on Ø13 feed handles. P.2035
- Ⓢ Extension cover HDEXT13 (Sold separately): Feed screw Ø13 handle can be extended. P.2035
- Ⓢ Travel per one Micrometer handle rotation is 0.5mm

Part Number Example: **YCERS60**

Notes on Vertical Use of X-Axis Stages

- The carriage may drop if mounted vertically with the micrometer head pointed down with Standard, CR, A or AR selected. (A load exceeding the spring pull force will cause the carriage to drop.)
- The carriage does not drop when mounted vertically with the micrometer head pointed down with AZ or AZR selected. However, do not apply a load exceeding the specified vertical load capacity for X-Axis as it may decrease the accuracy.