[Standard] Cross Roller

X-Axis Stages

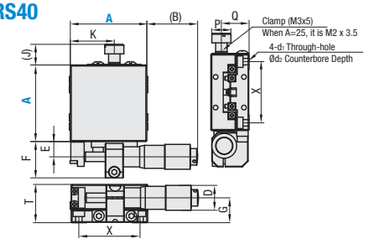
Travel per Rotation	Small	Medium	Large
Stroke	Short	Medium	Long
Load Capacity	Light	Medium	Heavy

X-Axis Stages

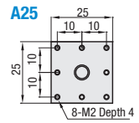


RoHS10

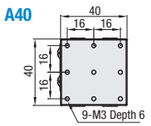
XCRS40



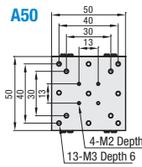
A25



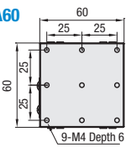
A40



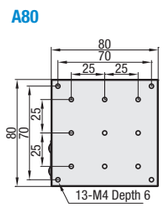
A50



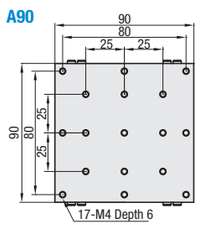
A60



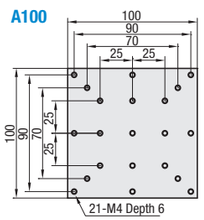
A80



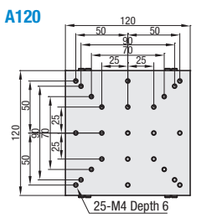
A90



A100



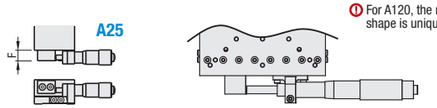
A120



ⓘ The Feeding Bracket for A25 is unique.

ⓘ Dimensional Details can be confirmed with CAD data provided on the website.

A25



ⓘ For A120, the micrometer head tip shape is unique

Material: Aluminum Alloy
Surface Treatment: Black Anodize

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
XCRS	25	29	±3.2	7	11.8	(6.8)	9.5	9.3	15	6	6.8	20	2.4	4.2	2.5
	40	26	±6.5	8	19	(10.8)	13	13	20	10	14.5	32	3.4	6	3.3
	50	23		8	19	(10.8)	13	13	20	10	14.5	40	3.4	6	3.5
	60	21		8	19	(10.8)	13	13	20	10	14.5	50	4.5	8	4.4
	50	22		8	19	(10.8)	13	13	20	10	14.5	70	4.5	8	4.4
	90	34.8	±12.5	8	19	(10.8)	13	13	20	10	14.5	80	4.5	8	5.3
	100	20.8		8	19	(10.8)	13	13	20	10	14.5	90	4.5	8	5.3
	120	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 • 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			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

Part Number
XCRS60

Part Number Alterations

Part Number		(CR, A, etc.)
XCRS40	-	CR
XCRS60	-	AR

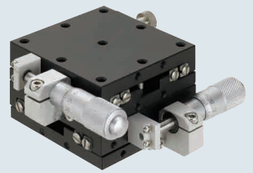
Alteration	Micrometer Head Position				
Spec.	Side Mount– Right / Left Reversed	Center	Center Mount, Right / Left Reversed	Center Mount, Top / Bottom Reversed	Center Mount, Right / Left & Top / Bottom Reversed
Code	CR	A	AR	AZ	AZR

[Standard] Cross Roller

XY-Axis

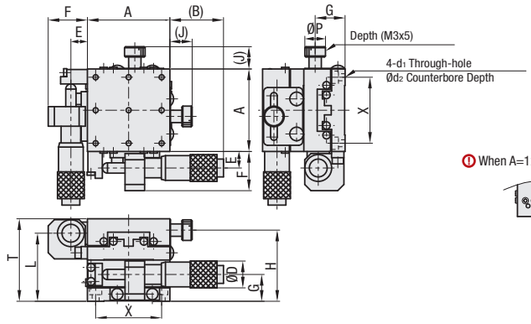
Travel per Rotation	Small	Medium	Large
Stroke	Short	Medium	Long
Load Capacity	Light	Medium	Heavy

XY-Axis

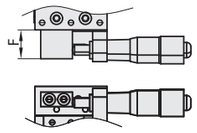


RoHS10

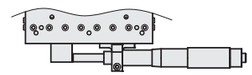
XYCRS



ⓘ 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.

Material: Aluminum Alloy
Surface Treatment: Black Anodize

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
XYCRS	25	29	±3.2	7	11.8	(6.8)	9.5	9.3	21.8	24.3	30	6	6.8	20	2.4	4.2	2.5
	40	26	±6.5	8	19	(10.8)	13	13	34.5	33	40	10	14.5	32	3.4	6	3.3
	50	23		8	19	(10.8)	13	13	34.5	33	40	10	14.5	40	3.4	6	3.5
	60	21		8	19	(10.8)	13	13	34.5	33	40	10	14.5	50	4.5	8	4.4
	50	22		8	19	(10.8)	13	13	34.5	33	40	10	14.5	70	4.5	8	4.4
	90	34.8	±12.5	8	19	(10.8)	13	13	34.5	33	40	10	14.5	80	4.5	8	5.3
	100	20.8		8	19	(10.8)	13	13	34.5	33	40	10	14.5	90	4.5	8	5.3
	120	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 • 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	120 µm	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

Part Number
XYCRS60

ⓘ 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 ointed down with AZ or AZR selected. However, do no apply a load exceeding the specified vertical load capacity for X-Axis as it may decrease the accuracy.