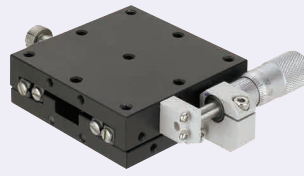


Points on Similar Product Comparison | Travel Accuracy (Straightness) 30µm Parallelism 30µm

Similar Product Pages P.1918

Features: Economical stages with a micrometer head capable of 0.01mm resolution adjustments. Micrometer head position is selectable for X-Axis stages.

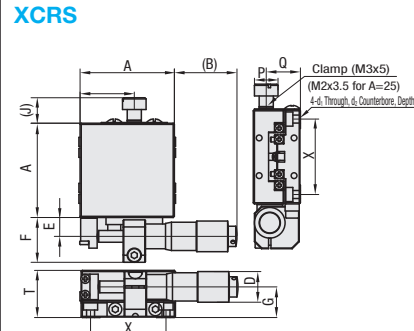
X-Axis



XY-Axis P.1942
Z-Axis P.1967

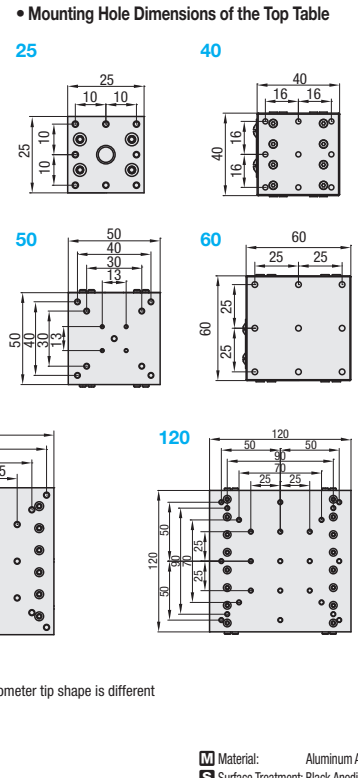
RoHS 10

XCRS



Clamp (M3x5)
(M2x3.5 for A=25)
4-φ Through φ Counterbore Depth 1

Mounting Hole Dimensions of the Top Table



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

A25 has a different feed bracket configuration.
See the CAD data for details.

A120 micrometer tip shape is different

Material: Aluminum Alloy
Surface Treatment: Black Anodize

| Part Number | Top View | | | | | | Front View | | | Side View | | | | | |
|-------------|----------|------|----------------------|-----|------|--------|------------|------|----|-----------|------|------|-----|-----|-----|
| | A | (B) | Travel Distance (mm) | E | F | (J) | D | G | T | P | Q | X | d1 | d2 | ℓ |
| XCRS | 25 | 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 | ±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 |
| | 80 | 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 |

Performance

| A | Stage Surface (mm) | Load Capacity (N) | | Max. Holding Force (N) (Ref.) | Travel Accuracy | | Allowable Moment (N-cm) | | | Moment Rigidity (°/N-cm) | | | Parallelism | Weight (kg) | Unit Price |
|-----|--------------------|-------------------|----------|-------------------------------|-----------------|--------------------|-------------------------|--------|---------|--------------------------|--------|---------|-------------|-------------|------------|
| | | Horizontal | Vertical | | Straightness | Motion Parallelism | Pitching | Yawing | Rolling | Pitching | Yawing | Rolling | | | |
| 25 | 25x25 | 9.8 | 4.9 | 60 | 30µm | 30µm | 1.1 | 0.8 | 0.4 | 3.03 | 2.85 | 1.80 | 50µm | 0.04 | |
| 40 | 40x40 | 19.6 | 9.8 | | | | 2.7 | 2.2 | 2.0 | 0.38 | 0.42 | 0.28 | | | |
| 50 | 50x50 | 29.4 | 14.7 | | | | 3.5 | 3.0 | 3.3 | 0.20 | 0.22 | 0.12 | | | |
| 60 | 60x60 | 49 | 19.6 | | | | 5.2 | 4.3 | 5.5 | 0.12 | 0.11 | 0.07 | | | |
| 80 | 80x80 | 98 | | | | | 19.2 | 15.1 | 17.3 | 0.05 | 0.05 | 0.04 | | | |
| 90 | 90x90 | 117.6 | | | | | 25.0 | 20.0 | 22.0 | 0.05 | 0.05 | 0.04 | | | |
| 100 | 100x100 | 147 | 49 | 36.0 | 30.0 | 33.0 | 0.06 | 0.07 | 0.05 | | | | | | |
| 120 | 120x120 | 196 | | 57.2 | 44.7 | 66.7 | 0.03 | 0.02 | 0.01 | | | | | | |

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) XCRS60

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


Alterations: Micrometer Head Position

| Alterations | 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 |

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.

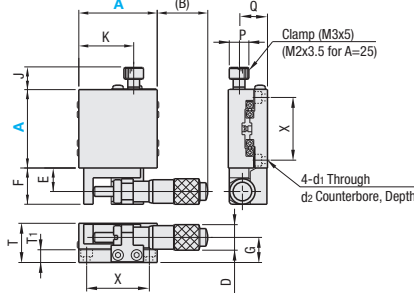
Features: High precision lightweight X-Axis Stages with Cross Roller slides.

X-Axis



XY-Axis P.1943
Z-Axis P.1968

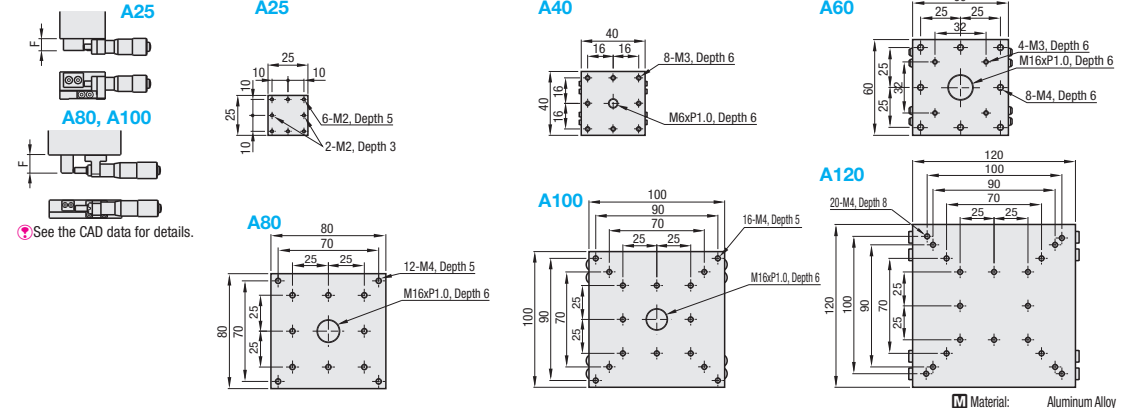
XPG



Clamp (M3x5)
(M2x3.5 for A=25)

4-φ Through φ Counterbore, Depth ℓ

Mounting Hole Dimensions of the Top Table



A25, 80, and 100 have different feed bracket configuration.
See the CAD data for details.

Material: Aluminum Alloy
Surface Treatment: Black Anodize

Standard Stages Similar Products (available for limited sizes only): XCRS (P.1917)

| Part Number | Top View | | | | | | Front View | | | | | Side View | | | | | |
|-------------|----------|------|----------------------|------|------|------|------------|------|------|----|-----|-----------|------|-----|-----|------|-----|
| | A | (B) | Travel Distance (mm) | E | F | J | K | D | G | T | T1 | P | Q | X | d1 | d2 | ℓ |
| XPG | 25 | 25 | ±3.2 | 4.5 | 6.5 | 6.6 | 15.0 | 9.3 | 8.5 | 15 | 4.5 | 6 | 10.5 | 20 | 2.5 | 4.75 | 2.0 |
| | 40 | 26 | ±6.5 | 12.0 | 18.5 | 11.3 | 28.0 | 13.0 | 12.8 | 20 | 6.5 | 10 | 14.5 | 32 | 3.5 | 6.0 | 3.5 |
| | 60 | 19.8 | | 12.0 | 18.5 | 11.3 | 42.5 | 13.0 | 12.8 | 20 | 6.5 | 10 | 14.5 | 50 | 4.5 | 8.0 | 4.0 |
| | 80 | 43.5 | | 17.0 | 22.0 | 11.3 | 55.0 | 18.0 | 10.8 | 20 | 5.7 | 10 | 14.5 | 70 | 4.5 | 8.0 | 4.5 |
| | 100 | 28.5 | | 17.0 | 22.0 | 11.3 | 67.5 | 18.0 | 10.8 | 20 | 5.7 | 10 | 14.5 | 90 | 4.5 | 8.0 | 4.5 |
| | 120 | 67.5 | ±25 | 13.0 | 20.0 | 11.5 | 67.5 | 21.0 | 18.0 | 30 | 9.5 | 10 | 18.0 | 100 | 4.5 | 8.0 | 4.5 |

Performance

| A | Stage Surface (mm) | Load Capacity (N) | | Travel Accuracy | | Moment Load Capacity (N-m) | | | Moment Rigidity (°/N-cm) | | | Parallelism | Weight (kg) | Accessory (4 pcs.) | Unit Price | | | |
|-----|--------------------|-------------------|----------|-----------------|--------------------|----------------------------|--------|---------|--------------------------|--------|---------|-------------|-------------|--------------------|------------|---------|------|--------|
| | | Horizontal | Vertical | Straightness | Motion Parallelism | Pitching | Yawing | Rolling | Pitching | Yawing | Rolling | | | | | | | |
| 25 | 25x25 | 9.8 | 4.9 | 3µm | 10µm | 25" | 15" | 30" | 30" | 1.1 | 0.8 | 0.4 | 3.03 | 2.85 | 1.80 | 30µm | 0.04 | SCB2-6 |
| 40 | 40x40 | 19.6 | 9.8 | | | | | | | 2.7 | 2.2 | 2.0 | 0.38 | 0.42 | 0.28 | | | |
| 50 | 50x50 | 29.4 | 14.7 | | | | | | | 5.2 | 4.3 | 5.5 | 0.12 | 0.11 | 0.07 | | | |
| 60 | 60x60 | 49.0 | 19.6 | | | | | | | 19.2 | 15.1 | 17.3 | 0.05 | 0.05 | 0.04 | | | |
| 80 | 80x80 | 98.0 | | | | | | | | 36.0 | 30.0 | 33.0 | 0.06 | 0.07 | 0.05 | | | |
| 100 | 100x100 | 147.0 | 49.0 | | | | | | | 57.2 | 44.7 | 66.7 | 0.03 | 0.02 | 0.01 | | | |
| 120 | 120x120 | 196.0 | | | | | | | | | | | | | 1.60 | SCB4-10 | | |

Micrometer Head Resolution: 10µm/division, Travel per Rotation: 0.5mm

Ordering Example: Part Number XPG60

Alterations: Part Number - (CR, CZ, A--etc.)
XPG40 - CZ

| Alterations | Micrometer Head Position | | | No Micrometer Head |
|-------------|----------------------------------|-----------------------------------|--------|--------------------|
| Spec. | Side Mount - Right/Left Reversed | Side Mount - Top/Bottom Reversed* | Center | No Micrometer Head |
| Code | CR | CZ | A | MN |

*Not applicable to XPG100 and 120.

Micrometer head and bracket will be removed before shipment.
Since there is an internal spring, the carriage will not be stationary unless the clamp is tightened.
Combination with alteration H is not available.

CZ: Attach Micrometer on the upper table (Standard Type has them attached to the bottom plate).
Mounting dimensions of micrometer head, feed screw and clamp are different from those of standard products. See the CAD data for details.
When other micrometer head mounting positions are desired, select from the "Specification Selectable Type" on P.1989.
Knob Cover HDCVR13 (Sold Separately): Ø13 micrometer knob diameter can be increased by installing the cover. P.2004
Extension Cover HDEX113 (Sold Separately): Feed knob of Ø13 micrometer head and feed screw can be extended. P.2004