

# [High Precision] Cross Roller Stages

## Horizontal Surface Z-Axis Cross Roller

**ZLPG** (Micrometer Head Pitch 0.5)

**ZLPCG** (Feed Screw Pitch 0.5)

**RoHS 10**

**ZLPG25**  
(Micrometer Head)

**ZLPCG25**  
(Feed Screw)

**ZLPG40**  
(Micrometer Head)

**ZLPCG40**  
(Feed Screw)

**ZLPG40H**  
(Micrometer Head)

**ZLPG60L**  
(Micrometer Head)

**ZLPG60**  
(Micrometer Head)

**ZLPCG60**  
(Feed Screw)

**ZLPG80**  
(Micrometer Head)

**ZLPCG80**  
(Feed Screw)

**Material:** Aluminum Alloy  
**Surface Treatment:** Black Anodize

Ⓢ The height dimensions in ( ) are the dimensions at the center of the travel distance.

Ⓢ Standard Stages Similar Products (available for limited sizes only): ZLLB

| Part Number               | Stage Surface | Travel Distance | Load Capacity | Travel Accuracy | Moment Capacity (N·m) |        |         | Moment Rigidity (°/N·cm) |        |         | Parallelism | Weight (kg) | Accessories |         |          |
|---------------------------|---------------|-----------------|---------------|-----------------|-----------------------|--------|---------|--------------------------|--------|---------|-------------|-------------|-------------|---------|----------|
|                           |               |                 |               |                 | Pitching              | Yawing | Rolling | Pitching                 | Yawing | Rolling |             |             | Type        | M-L     | Quantity |
| ZLPG<br>ZLPCG<br>(* only) | 25*           | 25 x 25         | ±2            | 9.8             | 3 μm                  | 0.7    | 0.5     | 0.5                      | 4.08   | 2.50    | 2.37        | 50 μm       | 0.06        | SCB2-8  | 4        |
|                           | 40*           | 40 x 40         | ±3            | 19.6            |                       | 2.3    | 1.5     | 2.0                      | 1.96   | 1.63    | 0.97        |             | 0.20        | SCB3-6  | 3        |
|                           | 40H           | 40 x 40         | ±3            |                 |                       | 3.6    | 2.2     | 2.4                      | 1.03   | 0.52    | 0.6         |             | 0.20        | SCB3-6  | 3        |
|                           | 60L           | 60 x 60         | ±3            |                 |                       | 2.3    | 1.5     | 4.2                      | 1.01   | 0.72    | 0.21        |             | 0.30        | SCB4-10 | 4        |
|                           | 60*           | 60 x 60         | ±5            |                 |                       | 6.2    | 4.1     | 6.2                      | 0.11   | 0.23    | 0.17        |             | 0.60        | SCB4-10 | 4        |
| 80*                       | 80 x 80       | ±5              | 29.4          | 3.8             | 2.5                   | 6.3    | 0.55    | 0.22                     | 0.06   | 1.00    | SCB4-10     | 4           |             |         |          |

- Ⓢ Micrometer Head Resolution 10μm/division \* 1 ZLPCG60 (feed screw) load capacity is 29.4N.
- Ⓢ Knob Cover HDCVR13 (Sold Separately): increases diameter of Ø 13 micrometer knob. **P.2035**
- Ⓢ Extension Cover HDEXT13 (Sold Separately): extends Ø 13 micrometer head knob. **P.2035**
- Ⓢ The micrometer head is only for raising and lowering the positioning stage. The scale and the amount by which the positioning stage is raised and lowered will vary.

**Application Example** Part Number **ZLPG40**

# [High Precision] Linear Ball Guide Stages

## Horizontal Surface Z-Axis Low Profile

**ZLTG** (Micrometer Head Pitch 0.5)

**ZLTCG** (Feed Screw Pitch 0.5)

**RoHS 10**

**ZLTG40**

**ZLTCG40**

**ZLTG60**

**ZLTCG60**

**ZLTG80**

**ZLTCG80**

**Material:** Aluminum Alloy  
**Surface Treatment:** Black Anodize

Ⓢ The height dimensions in ( ) are the dimensions at the center of the travel distance. Ⓢ Feed Screw and Micrometer Head materials, see P.2102-2103.

| Part Number | Stage Surface | Travel Distance | Load Capacity | Travel Accuracy | Moment Capacity (N·m) |        |         | Moment Rigidity (°/N·cm) |        |         | Parallelism (μm) | Weight (kg) | Accessories (4 pcs.) |        |
|-------------|---------------|-----------------|---------------|-----------------|-----------------------|--------|---------|--------------------------|--------|---------|------------------|-------------|----------------------|--------|
|             |               |                 |               |                 | Pitching              | Yawing | Rolling | Pitching                 | Yawing | Rolling |                  |             |                      |        |
| ZLTG        | 40            | 40 x 40         | ±3            | 19.6            | 5                     | 0.9    | 1.5     | 0.5                      | 3.66   | 0.91    | 5.64             | 100         | 0.16                 | SCB3-6 |
|             | 60            | 60 x 60         |               |                 |                       |        | 2.3     | 0.7                      | 3.67   | 0.25    | 4.81             |             | 0.24                 | SCB4-6 |
|             | 80            | 80 x 80         |               |                 |                       |        | 3.0     | 0.6                      | 3.52   | 0.07    | 4.99             |             | 0.32                 | SCB4-6 |
| ZLTCG       | 40            | 40 x 40         | ±3            | 29.4            | 5                     | 0.9    | 1.5     | 0.5                      | 3.66   | 0.91    | 5.64             | 100         | 0.14                 | SCB3-6 |
|             | 60            | 60 x 60         |               |                 |                       |        | 2.3     | 0.7                      | 3.67   | 0.25    | 4.81             |             | 0.22                 | SCB4-6 |
|             | 80            | 80 x 80         |               |                 |                       |        | 3.0     | 0.6                      | 3.52   | 0.07    | 4.99             |             | 0.30                 | SCB4-6 |

- Ⓢ Micrometer Head Resolution: 10μm/division
- Ⓢ The micrometer head is only for raising and lowering the positioning stage. The scale and the amount by which the positioning stage is raised and lowered will vary.

**Part Number Example** Part Number **ZLTG80**