

## Z-axis Cross Roller Guide: KZC04015/KZC06020

RoHS

KZC04015-C



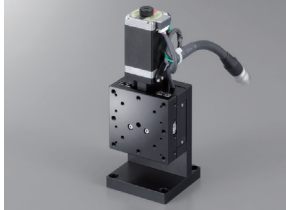
KZC04015-PA



KZC06020-C



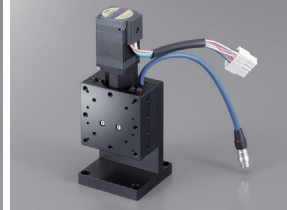
KZC06020-F



KZC06020-G



KZC06020-PA



Motorized Stage

X

XY

Z

Horizontal Z

XYZ

Goniometer

Rotary

Unit

Controller

Linear Ball

CAVE-X Linear ball

Cross Roller

Slide Guide

φ40

φ50

φ60

φ70

φ80

φ100

φ120

Other



▶ Cable P.1-207~  
▶ Electrical specification P.1-091~

### 1 Table size

|    |                               |
|----|-------------------------------|
| 04 | <input type="checkbox"/> 40mm |
| 06 | <input type="checkbox"/> 60mm |

\* Not available 04020 and 06015

### 2 Travel length

|     |      |
|-----|------|
| 015 | 15mm |
| 020 | 20mm |

### 3 Motor option

| Code | Specification                                   |
|------|---|
| C    | Standard  |
| F    | High-torque                                     |
| G    | High resolution                                 |
| PA   | <input type="checkbox"/> 28 α Step (Driver set) |

\* PA can choose only cable code P. Cannot choose the blank.  
\* In case of KZC04, can be chosen only C and PA.

### 4 Cable option

| Code  | Specification                          | Cable type |
|-------|--|------------|
| A     | 2m                                     | D214-2-2E  |
| B     | 2m One end loose                       | D214-2-2EK |
| C     | 4m                                     | D214-2-4E  |
| D     | 4m One end loose                       | D214-2-4EK |
| E     | Only connector (Cable is not included) | —          |
| F     | Robot cable 2m                         | D214-2-2R  |
| G     | Robot cable 2m one end loose           | D214-2-2RK |
| H     | Robot cable 4m                         | D214-2-4R  |
| J     | Robot cable 4m one end loose           | D214-2-4RK |
| Blank | Cable is not included (Standard)       | —          |
| P     | Cable for α step 3m                    | —          |

\* One end loose position to only stage opposite side.  
\* If you choose the option specification, please add the difference to standard price.  
\* See page P.1-207, 209~ for more cable details.  
\* Please select "Code A, C, F or H" when connect with stepping motor controller(DS102/112).

|                                      |                                      | SPEC                            |                            |                      |                            |            |                             |                      |
|--------------------------------------|--------------------------------------|---------------------------------|----------------------------|----------------------|----------------------------|------------|-----------------------------|----------------------|
| Model                                |                                      | KZC04015-C                      | KZC04015-PA                | KZC06020-C           | KZC06020-F                 | KZC06020-G | KZC06020-PA                 |                      |
| Mechanical specification             | Travel length                        | 15mm                            |                            |                      | 20mm                       |            |                             |                      |
|                                      | Table size                           | 40×40mm                         |                            |                      | 60×60mm                    |            |                             |                      |
|                                      | Feed screw (Ball screw)              | φ6 lead 1                       |                            |                      | φ8 lead 1                  |            |                             |                      |
|                                      | Guide                                | Crossed roller guide            |                            |                      |                            |            |                             |                      |
| Main materials-Finishing             |                                      | Aluminum-Black almite finishing |                            |                      |                            |            |                             |                      |
| Accuracy specification               | Weight                               | 0.38kg                          | 0.43kg                     | 0.80kg               | 0.90kg                     | 0.80kg     | 0.85kg                      |                      |
|                                      | Resolution (Pulse)                   | Full/Half                       | 2μm/1μm                    | 1μm (Set to 1000P/R) | 2μm/1μm                    |            | 1μm/0.5μm                   | 1μm (Set to 1000P/R) |
|                                      |                                      | Microstep                       | 0.1μm (1/20 on resolution) | —                    | 0.1μm (1/20 on resolution) |            | 0.05μm (1/20 on resolution) | —                    |
|                                      | MAX speed                            | 10mm/sec                        |                            |                      | 20mm/sec                   |            |                             |                      |
|                                      | Load capacity (Excitation)           | 3.0kgf [29.4N]                  |                            |                      |                            |            |                             |                      |
|                                      | Vertical degree                      | Within 7.5μm/Full stroke        |                            |                      | Within 10μm/Full stroke    |            |                             |                      |
| Sensor                               | Pitching/Yawing                      | Within 25"/Within 20"           |                            |                      | Within 20"/Within 15"      |            |                             |                      |
|                                      | Limit sensor                         | Installed                       |                            |                      |                            |            |                             |                      |
|                                      | Origin sensor                        | Installed                       |                            |                      |                            |            |                             |                      |
|                                      | Slit origin sensor                   | —                               |                            |                      |                            |            |                             |                      |
| Provided screw (Hexagon-headed bolt) |                                      | 4 of M3—8                       |                            |                      | 4 of M4—10                 |            |                             |                      |
| Single axis accuracy specification   | Uni-directional positioning accuracy | Within 10μm                     |                            |                      | Within 5μm                 |            |                             |                      |
|                                      | Repeatability positioning accuracy   | Within ±0.5μm                   |                            |                      | Within ±0.3μm              |            |                             |                      |
|                                      | Lost motion                          | —                               |                            |                      | Within 1μm                 |            |                             |                      |
|                                      | Backlash                             | —                               |                            |                      | Within 0.5μm               |            |                             |                      |
|                                      | Straightness                         | —                               |                            |                      | Within 3μm                 |            |                             |                      |

※ Motor code [C·F·G] not include the cable. Choose the cable from cable code table.  
※ Motor code [PA] includes the driver, motor and sensor cable.