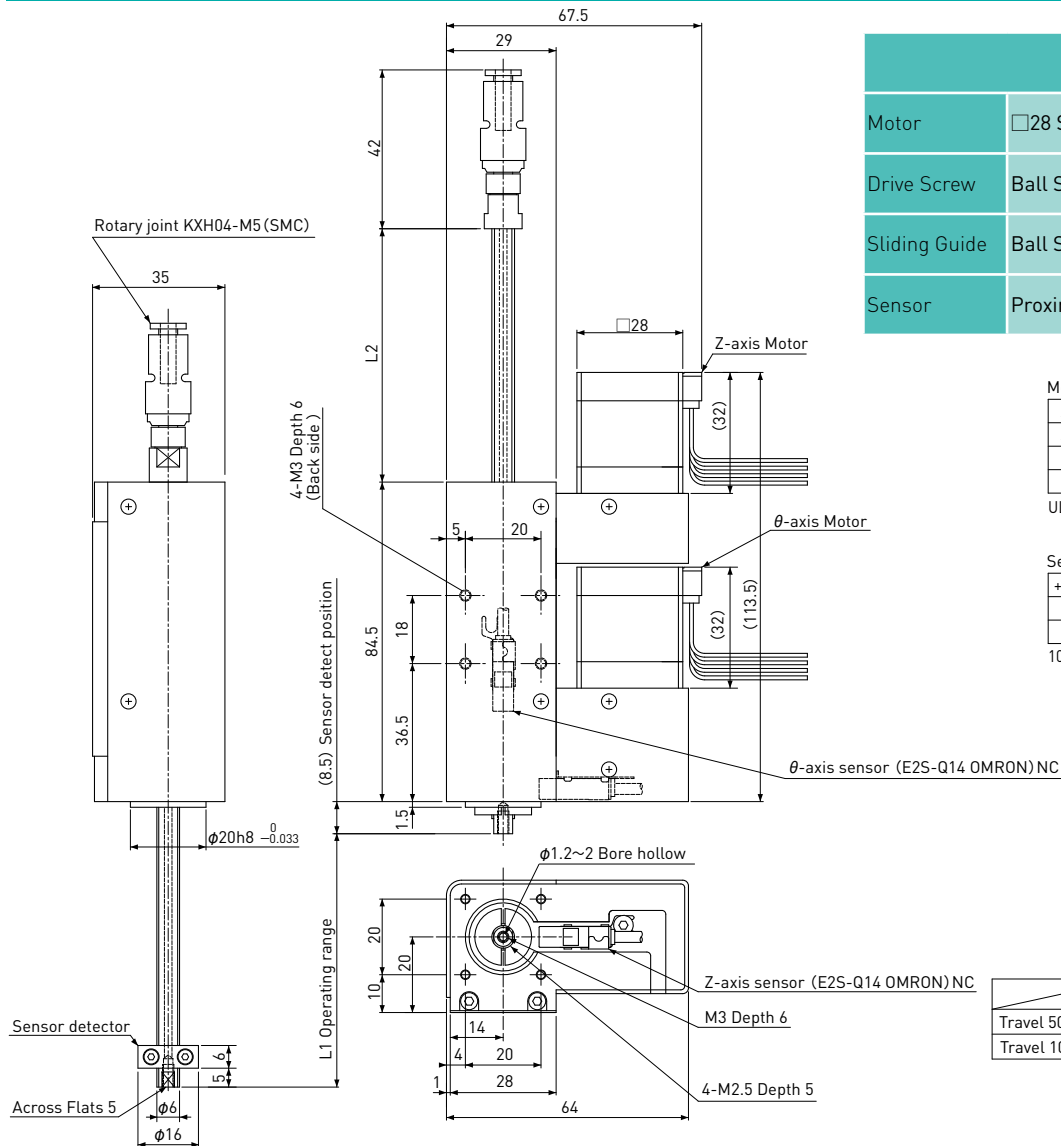


BD VZ 06-G 10 050/100 N 02

□28 2-phase Stepping Motor  
Lead 10mm Travel 50/100mm



| Parts List    |                                  |
|---------------|----------------------------------|
| Motor         | □28 Stepping Motor 1.5A/phase    |
| Drive Screw   | Ball Screw $\phi 6$ (Lead 10mm)  |
| Sliding Guide | Ball Spline $\phi 6$ mm          |
| Sensor        | Proximity Sensor E2S-Q14 (OMRON) |

Motor(Z,  $\theta$  -axis)

|           |       |
|-----------|-------|
| A         | Black |
| $\bar{A}$ | Green |
| B         | Red   |
| $\bar{B}$ | Blue  |

UL3265,AWG24 (600mm)

Sensor(Z,  $\theta$  -axis)

|         |       |
|---------|-------|
| +12~24V | Brown |
| LS      | Black |
| GND     | Blue  |

1000mm

|              | L1  | L2  |
|--------------|-----|-----|
| Travel 50mm  | 67  | 67  |
| Travel 100mm | 117 | 117 |

● Specifications

※The numbers in table below are reference. Detail dimensions will be provided by drawing.

| Items                            | Z Axis                               | $\theta$ Axis                              |
|----------------------------------|--------------------------------------|--|
| Movable Range                    | 50mm / 100mm                         | $\pm 360^\circ$                            |
| Repeatability                    | $\pm 0.020$ mm                       | $\pm 0.03^\circ$                           |
| Resolution                       | 25 $\mu$ m (Full Step)               | 0.9 $^\circ$ (Full Step)                   |
| Maximum Speed                    | 200mm / sec                          | 1080 $^\circ$ / sec                        |
| Acceleration & Deceleration time | Min. 0.2sec                          | Min. 0.04sec                               |
| Reference Thrust Force           | 10N                                  | —  |
| Maximum Permissible Moment       | —                                    | 0.5 $\times 10^{-4}$ kg $\cdot$ m $^2$ (※) |
| Reduction ratio                  | 1/2                                  | 1/2  |
| Mass                             | 480g (50 travel) , 490g (100 travel) |  |
| Operating Temperature            | 0~40 $^\circ$ C (No Condensation)    |  |

| Reference of Moment of Inertia |              |             |
|--------------------------------|--------------|-------------|
| Dia.                           | Height       |             |
|                                | Aluminum     | Steel       |
| $\phi 30$ mm                   | 225mm (445g) | 80mm (445g) |
| $\phi 40$ mm                   | 71mm (250g)  | 25mm (250g) |
| $\phi 50$ mm                   | 29mm (160g)  | 10mm (160g) |

Precautions

- 1) The Z-axis does not have brake device. Please be careful when the power supply is switched off in case of Z-axis may free-fall.
- 2) Reference of Moment of Inertia table shows the theoretical values. KSS recommends that you should apply actual moment to the machine and confirm the safety operation before use.

※ For the Maximum Permissible Moment, see "Reference of Moment of Inertia" table above.