

Z Axis Steel Extended Contact Translation Stages (Vertical Mounting) | TSD-LONG-SZ

RoHS

Z axis stages designed for mounting on a vertical surface for the load to bear on the micrometer head vs. pulling against the spring.

The rectangular shape minimizes the footprint while providing longer travel.

- Hardened steel linear translation stages with integrated bearing ways and a black chrome finish. Our “Extended Contact” technology yields superior stability, stiffness, accuracy, and durability.



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V Groove Screw

Others

15 × 15 mm

25 × 25 mm

40 × 40 mm

60 × 60 mm

65 × 65 mm

80 × 80 mm

100 × 100 mm

120 × 120 mm

Others

Specifications

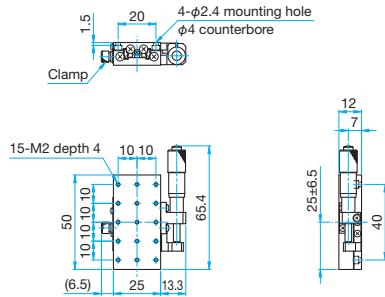
| Part Number | METRIC | TSD-25501SZ | TSD-40801SZ | TSD-60121SZ | TSD-65121SZ-M6 |
|-------------------------------------|-------------------|-------------------------------------|---------------|---------------|----------------|
| | INCH | — | TSD-40801SZUU | — | TSD-65121SZUU |
| Stage Size [mm] | | 25×50 | 40×80 | 60×120 | 65×120 |
| Axes of Travel | | Z axis | | | |
| Travel [mm] | | ±6.5 | ±12.5 | ±20 | ±20 |
| Lead of Actuator [mm/rotation] | | 0.5 | 0.5 | 0.5 | 0.5 |
| Micrometer Readable Resolution [mm] | | 0.01 | 0.01 | 0.01 | 0.01 |
| Guide Method | | Extended contact ball bearing guide | | | |
| Primary Material | | Steel | | | |
| Finish | | Super black chrome | | | |
| Load Capacity [N] | | 9.8 (1.0kgf) | 19.6 (2.0kgf) | 29.4 (3.0kgf) | 29.4 (3.0kgf) |
| Travel Accuracy | Straightness [μm] | 2 | 2 | 2 | 3 |
| Max. Moment Capacity | Pitch [N·m] | 2.0 | 2.6 | 3 | 3 |
| | Roll [N·m] | 1.4 | 2.6 | 3 | 3 |
| Moment Stiffness | Pitch ["/N·cm] | 1.12 | 0.15 | 0.1 | 0.1 |
| Running Parallelism [μm] | | 10 | 10 | 10 | 10 |
| Weight [kg] | | 0.1 | 0.4 | 1.0 | 1.2 |



Outline Drawing

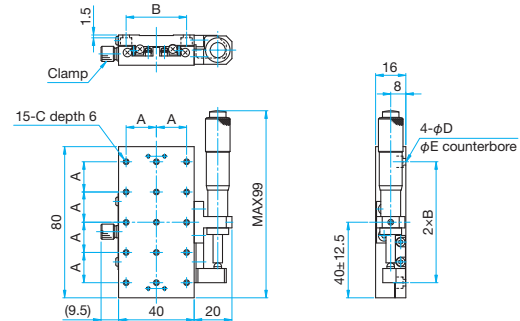
TSD-25501SZ

Hexagonal socket head cap screw M2x4...4 screws



TSD-40801SZ/40801SZUU

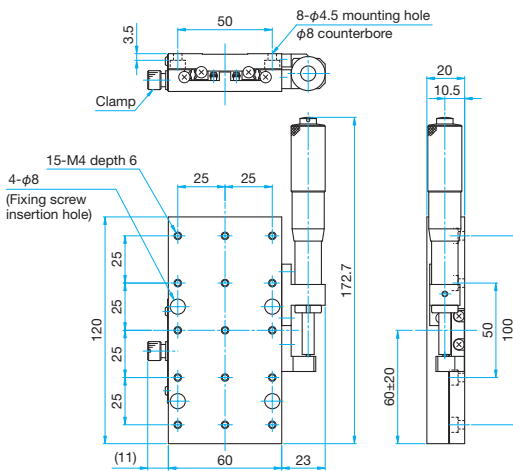
Hexagonal socket head cap screw M3x6...4 screws
Hexagonal socket head cap screw 6-32UNCx3/16...4 screws (UU)



| Part Number | A (mm) | B (mm) | C | D (mm) | E (mm) |
|----------------------|--------|--------|---------|--------|--------|
| TSD-40801SZ | 16 | 32 | M3 | 3.5 | 6 |
| TSD-40801SZUU | 15.875 | 31.75 | 6-32UNC | 4 | 6.5 |

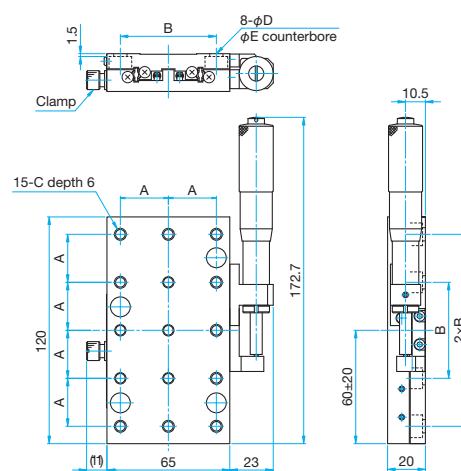
TSD-60121SZ

Hexagonal socket head cap screw M4x8...4 screws



TSD-65121SZ-M6/65121SZUU

Hexagonal socket head cap screw M6x6...4 screws (M6)
Hexagonal socket head cap screw 1/4-20UNCx1/4...4 screws (UU)



| Part Number | A (mm) | B (mm) | C | D (mm) | E (mm) |
|-----------------------|--------|--------|-----------|--------|--------|
| TSD-65121SZ-M6 | 25 | 50 | M6 P1 | 6.5 | 11 |
| TSD-65121SZUU | 25.4 | 50.8 | 1/4-20UNC | 7 | 12 |

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