



| Ball screw specifications | | |
|---|-------------------------|-------------------|
| Product classification | Preloaded | Precise clearance |
| Shaft dia. X Lead / Direction of turn | 25 × 25 / Right | |
| Preload / Ball recirculation | P preload / Return tube | |
| Ball dia. / Ball circle dia. | 4.762 / 26.25 | |
| Effective turns of balls | 1.5 × 1 | |
| Accuracy grade/ Preload / Axial play | C5/Z | C5/T |
| Basic load rating (N) | Dynamic C_a | 7730 |
| | Static C_{0a} | 12700 |
| Axial play | 0 | 0.005 or less |
| Dynamic friction torque, (N · cm) | 3.9~24.5 | 4.9 |
| Spacer ball | Yes | None |
| Factory packed grease | NSK grease LR3 | |
| Internal spatial volume of nut (cm ³) | 7.5 | |

| Ball screw No. | | Stroke | |
|-------------------------|--------------------------|---------|--------------------------------------|
| | | Nominal | Maximum (L ₁ -Nut length) |
| Preloaded (LPFT) | Precise clearance (LSFT) | | |
| W2507FA-3P-C5Z25 | W2507FA-4-C5T25 | 600 | 660 |
| W2509FA-3P-C5Z25 | W2509FA-4-C5T25 | 800 | 860 |
| W2511FA-3P-C5Z25 | W2511FA-4-C5T25 | 1000 | 1060 |
| W2513FA-3P-C5Z25 | W2513FA-4-C5T25 | 1200 | 1260 |
| W2515FA-3P-C5Z25 | W2515FA-4-C5T25 | 1400 | 1460 |
| W2517FA-3P-C5Z25 | W2517FA-4-C5T25 | 1600 | 1660 |
| W2521FA-3P-C5Z25 | W2521FA-4-C5T25 | 2000 | 2060 |

- Remarks
1. We recommend NSK support unit WBK20-01A (square type, fixed side), WBK20S-01 (square type, simple support side), and WBK20-11 (round type, fixed side).
 2. NSK grease LR3 is recommended. The amount for replenishing should be about 50% of nut internal space capacity.
 3. Permissible rotational speed is determined by a $d \cdot n$ value and a critical speed. See page B509. Root diameter of screw shaft (dr) is 21.3 mm.

| Screw shaft length | | | Lead accuracy | | | Shaft run-out ** | Mass (Kg) | Permissible rotational speed N (min ⁻¹) | |
|--------------------|----------------|----------------|---------------|----------------|----------------|------------------|-----------|---|---------------|
| L ₁ | L ₂ | L ₃ | T | e _p | v _i | | | Supporting condition | |
| | | | | | | | | Fixed - Simple support | Fixed - Fixed |
| 750 | 780 | 913 | 0 | 0.035 | 0.025 | 0.055 | 4.0 | 2800 | 2800 |
| 950 | 980 | 1113 | 0 | 0.040 | 0.027 | 0.070 | 4.7 | 2800 | 2800 |
| 1150 | 1180 | 1313 | 0 | 0.046 | 0.030 | 0.090 | 5.4 | 2540 | 2800 |
| 1350 | 1380 | 1513 | 0 | 0.054 | 0.035 | 0.090 | 6.2 | 1830 | 2540 |
| 1550 | 1580 | 1713 | 0 | 0.054 | 0.035 | 0.120 | 7.0 | 1380 | 1930 |
| 1750 | 1780 | 1913 | 0 | 0.065 | 0.040 | 0.120 | 7.7 | 1080 | 1510 |
| 2150 | 2180 | 2313 | 0 | 0.077 | 0.046 | 0.160 | 9.1 | 710 | 1000 |