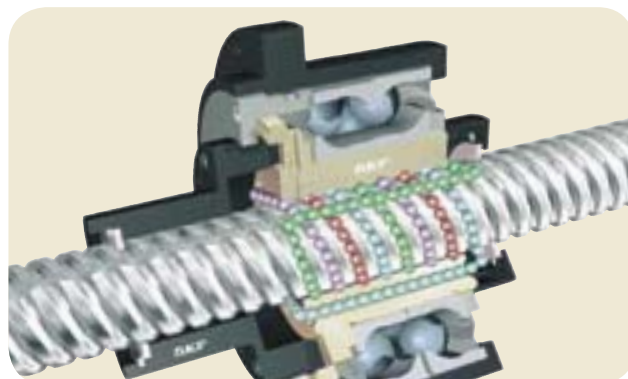
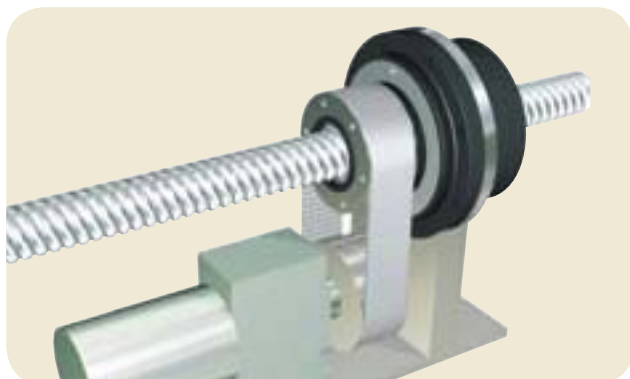


Rotating nut



Concept

The nut rotates inside bearings and moves along the fixed long lead screw shaft.

The drive motor moves with the nut, so inertia & critical speed problems, associated with a long rotating shaft, are minimised.

Design details

- 72 series angular contact bearings are directly mounted on the nut.
- They are preloaded in “0” configuration in order to fully support the torque due to the belt tension.

- 2 Nilos seals protect these bearings against pollution and permit lubrication for life.
- Two versions available:
 - * Ball screw with axial play: SLT
 - * Ball screw with backlash elimination: BLT
- Two brush wipers are mounted in the standard configuration for better protection.
- Ball screw lubrication: through the nipple placed on the housing external diameter in the standard version, or as an option through the screw shaft.
- Ball nut greased with SKF LGMT2. Other lubricants possible on request.

Benefits

- Easy and simple to incorporate.
- Compact solution, ready to use.
- Fixed screw shaft: simplified mounting.
- Inertia considerably reduced: 3800 kgmm² instead of 6000 kgmm² for a screw shaft, 40x40 - 4.5 m stroke.
- Smaller, lighter, lower power motors.
- Higher linear speeds: up to 110 m/min.

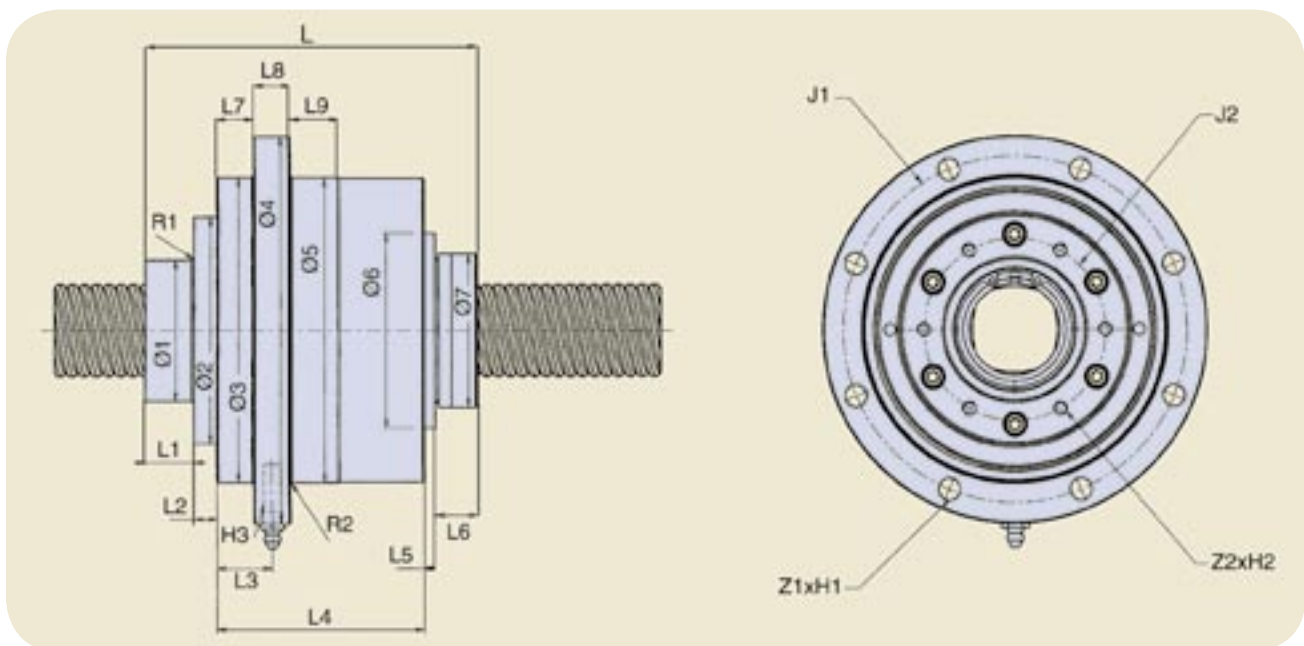
| Size | Ball screw capacities | | Bearing axial capacities | |
|-------|---------------------------|-----------------------------|---------------------------|-----------------------------|
| | Dynamic capacity C_a | Static capacity C_{0a} | Dynamic capacity C_a | Static capacity C_{0a} |
| | kN | kN | kN | kN |
| 25x20 | 39,5 | 96,6 | 61,8 | 56,0 |
| 25x25 | 33,5 | 80,5 | 61,8 | 56,0 |
| 32x20 | 49,8 | 141,2 | 78,0 | 76,5 |
| 32x32 | 32,1 | 87,3 | 78,0 | 76,5 |
| 32x40 | 30,0 | 81,7 | 78,0 | 76,5 |
| 40x20 | 54,7 | 176,7 | 93,6 | 91,5 |
| 40x40 | 53,3 | 133,8 | 114,0 | 118,0 |
| 50x50 | 94,8 | 238,2 | 156,0 | 166,0 |

Rotating nut inertia

| Size | Inertia Pulley support kgmm ² | Mass of rotating nut kg |
|-------|--|-------------------------------|
| 25x20 | 1012 | 4,5 |
| 25x25 | 1023 | 4,6 |
| 32x20 | 1935 | 7,2 |
| 32x32 | 1919 | 7,1 |
| 32x40 | 1949 | 7,1 |
| 40x20 | 3095 | 7,5 |
| 40x40 | 3784 | 8,4 |
| 50x50 | 11482 | 15,5 |

Rotating nut capacities

| Size | Max. transmissible torque Nm | Max. transmissible axial load kN |
|-------|------------------------------------|--|
| 25x20 | 180 | 68,3 |
| 25x25 | 180 | 68,3 |
| 32x20 | 209 | 107,0 |
| 32x32 | 209 | 87,3 |
| 32x40 | 209 | 81,7 |
| 40x20 | 240 | 116,0 |
| 40x40 | 246 | 93,3 |
| 50x50 | 803 | 162,0 |



| | Ø1 | Ø2 | Ø3 | Ø4 | Ø5 | Ø6 | Ø7 | L | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | R1 | R2 | J1 | J2 | Z1xH1 | Z2xH2 | H3 |
|---------------|----|-------|-------|-----|-----|-----|----|-------|----|------|------|-----|-----|------|------|----|----|-----|-----|-----|-----|-------|---------|------|
| | | | | | | | | | | | | | | | | | | max | max | | | | | |
| Designation | h8 | | | | | | g6 | | | | | | | | | | | | | mm | | | | |
| SLT/BLT 25x20 | 40 | 72,5 | 100,0 | 133 | 100 | 65 | 48 | 121,0 | 15 | 12,4 | 19,9 | 74 | 2,9 | 16,8 | 12,4 | 15 | 15 | 0,8 | 0,8 | 116 | 55 | 6xØ9 | 6xM6x20 | M6x1 |
| SLT/BLT 25x25 | 40 | 72,5 | 100,0 | 133 | 100 | 65 | 48 | 126,2 | 15 | 12,4 | 19,9 | 74 | 2,9 | 21,9 | 12,4 | 15 | 15 | 0,8 | 0,8 | 116 | 55 | 6xØ9 | 6xM6x20 | M6x1 |
| SLT/BLT 32x20 | 50 | 82,0 | 119,5 | 150 | 120 | 76 | 56 | 132,4 | 20 | 3,8 | 27,5 | 89 | 2,2 | 17,4 | 20,0 | 15 | 20 | 0,8 | 0,8 | 135 | 68 | 6xØ9 | 6xM6x20 | M6x1 |
| SLT/BLT 32x32 | 50 | 82,0 | 119,5 | 150 | 120 | 76 | 50 | 126,8 | 20 | 3,8 | 27,5 | 89 | 2,2 | 11,8 | 20,0 | 15 | 20 | 0,8 | 0,8 | 135 | 68 | 6xØ9 | 6xM6x20 | M6x1 |
| SLT/BLT 32x40 | 50 | 82,0 | 119,5 | 150 | 120 | 76 | 53 | 125,7 | 20 | 3,8 | 27,5 | 89 | 2,2 | 10,7 | 20,0 | 15 | 20 | 0,8 | 0,8 | 135 | 68 | 6xØ9 | 6xM6x20 | M6x1 |
| SLT/BLT 40x20 | 58 | 93,0 | 125,0 | 159 | 125 | 80 | 63 | 136,4 | 20 | 9,3 | 22,5 | 85 | 4,7 | 17,4 | 15,0 | 15 | 20 | 0,8 | 0,8 | 142 | 75 | 8xØ9 | 6xM6x20 | M8x1 |
| SLT/BLT 40x40 | 60 | 93,0 | 137,0 | 168 | 137 | 102 | 72 | 159,3 | 47 | 8,8 | 19,0 | 83 | 0 | 20,5 | 11,5 | 15 | 20 | 1,6 | 1,6 | 153 | 80 | 8xØ9 | 6xM6x20 | M8x1 |
| SLT/BLT 50x50 | 70 | 120,0 | 170,0 | 210 | 170 | 110 | 85 | 163,3 | 20 | 15,5 | 25,4 | 100 | 4,5 | 23,5 | 15,7 | 20 | 25 | 1,6 | 1,6 | 190 | 106 | 8xØ11 | 6xM8x30 | M8x1 |

All tolerances js13 if not specified.