## **INSTALLATION**

- 1. Clean dust from drive shaft.
- Place shaft between upper and lower blocks. Lightly tighten thrust adjustment bolts until the clearance between the shaft and the bearings diminishes.
- 3. Temporarily attach the slide screw to the table.
- Adjust the parallelism between the slide screw and the linear motion guides by manually moving the table back and forth. Fix the shaft accurately after the required parallelism is achieved.
- Tighten the thrust adjustment bolts evenly while appling a thrust force to the table untill slippage disappears. Care should be required to avoid excessive tightening which results in shortening the rated life.

## **USE AND HANDLING PRECAUTIONS**

- It is recommended to use a heat-treated ground shaft such as NB shaft to prevent wear and to obtain smooth motion. (refer to page F-2)
- Since the slide screw utilizes the friction between the bearings and the shaft, the lead varies due to the effect of load variation, movement direction, and shaft conditions. As the values of standard lead are advisory, highly accurate positioning can be obtained by attaching a linear scale to the table.
- If the slide screw and linear motion guides are not parallel, an unbalanced load will be applied to the slide screw. Exercise care in controlling the parallelism.

- The slide screw slips on the shaft, if an excessive load is applied, in order to prevent damage. However, frequent slippage should be avoided in order not to shorten the travel life.
- Please transfer the radial load to linear motion guides since the radial load on the slide screw shortens the rated life. For long stroke applications, it is recommended to use linear and rotary motion components such as Slide Rotary Bush (refer to page E-8) along with a slide screw.

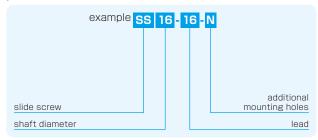
# SPECIAL REQUIREMENTS

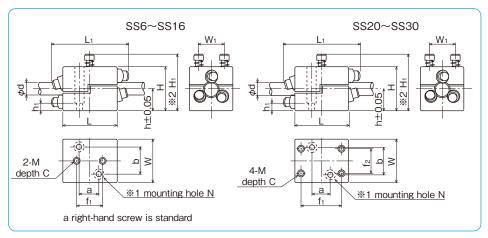
NB can fabricate slide screws to meet special requirements, including screws with a special lead or a reverse lead. Contact NB for further information.

# **SS TYPE**



#### part number structure





|        | shaft<br>diameter | major dimensions |    |    |    |    |                |                |    |                |    |    |    |      |    |                | standard |                   | maximum              |      |
|--------|-------------------|------------------|----|----|----|----|----------------|----------------|----|----------------|----|----|----|------|----|----------------|----------|-------------------|----------------------|------|
| part   | d                 | Н                | W  | L  | h  | Нı | L <sub>1</sub> | W <sub>1</sub> | f1 | f <sub>2</sub> | а  | b  | M  | C    | N  | h <sub>1</sub> | lead     | maximum<br>thrust | tightening<br>torque | mass |
| number |                   |                  |    |    |    |    |                |                |    |                |    |    |    |      |    |                | *3       |                   |                      |      |
|        | mm                | mm               | mm | mm | mm | mm | mm             | mm             | mm | mm             | mm | mm |    | mm   |    | mm             | mm       | N                 | N∙m                  | kg   |
| SS 6   | 6                 | 20.5             | 20 | 25 | 10 | 28 | 36             | 12             | 10 |                | -  | _  | М3 | 6.5  | _  | _              | 6, 9     | 24.5              | 0.03                 | 0.03 |
| SS 8   | 8                 | 28.5             | 28 | 40 | 14 | 40 | 56             | 18             | 18 |                | 1  |    | M4 | 9    | _  | _              | 8,12     | 73.5              | 0.14                 | 0.09 |
| SS10   | 10                | 36.5             | 36 | 46 | 18 | 51 | 62             | 24             | 20 | _              | 20 | 24 | M4 | 12   | M4 | 8              | 10,15    | 118               | 0.25                 | 0.17 |
| SS12   | 12                | 40.5             | 40 | 50 | 20 | 54 | 72             | 25             | 25 | _              | 20 | 25 | M5 | 12.5 | M4 | 10             | 12,18    | 147               | 0.31                 | 0.22 |
| SS13   | 13                | 40.5             | 40 | 50 | 20 | 54 | 72             | 25             | 25 | _              | 20 | 25 | M5 | 12.5 | M4 | 10             | 13,15    | 147               | 0.31                 | 0.22 |
| SS16   | 16                | 50.5             | 50 | 60 | 25 | 62 | 86             | 32             | 30 | _              | 25 | 32 | M5 | 16   | M5 | 10             | 16,24    | 196               | 0.41                 | 0.39 |
| SS20   | 20                | 60.5             | 60 | 70 | 30 | 71 | 97             | 40             | 50 | 40             | 30 | 40 | M6 | 12   | M6 | 10             | 20,30    | 265               | 0.56                 | 0.57 |
| SS25   | 25                | 76.5             | 76 | 80 | 38 | 82 | 110            | 50             | 60 | 50             | 32 | 50 | M8 | 12   | M8 | 15             | 25       | 392               | 1.1                  | 1.05 |
| SS30   | 30                | 89               | 90 | 88 | 44 | 92 | 127            | 60             | 60 | 70             | 36 | 60 | M8 | 15   | M8 | 15             | 30,45    | 539               | 1.4                  | 1.65 |

- %1 The mounting holes are machined on request.
- $\ensuremath{\%2}\ H_1$  is the minimum height when the maximum thrust is applied.
- \*3 The values of standard lead are advisory.

1N = 0.102kgf 1N·m = 0.102kgf·m