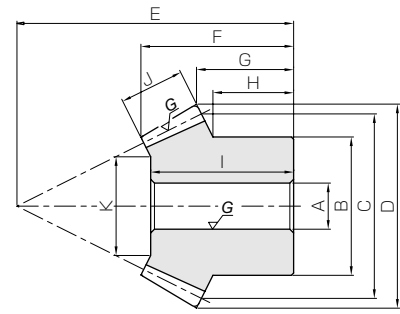




| Specifications | |
|-----------------|--------------------------|
| Precision grade | JIS B 1704 grade 2 |
| Gear teeth | Gleason |
| Pressure angle | 20° |
| Helix angle | 35° |
| Material | S45C |
| Heat treatment | Teeth induction hardened |
| Tooth hardness | 45 ~ 55HRC |



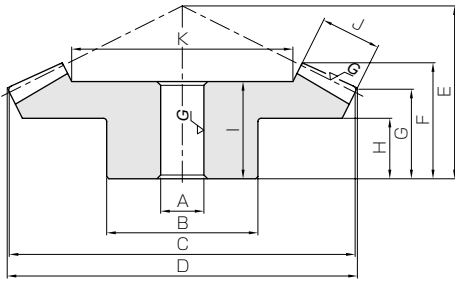
B3

| Catalog No. | Gear ratio | Module | No. of teeth | Direction of spiral | Shape | Bore | Hub dia. | Pitch dia. | Outside dia. | Mounting distance | Total length | Crown to back length |
|--------------------------------|------------|--------|--------------|---------------------|-------|-----------------|----------|------------|--------------|-------------------|--------------|----------------------|
| | | | | | | A _{H7} | B | C | D | E | F | G |
| SBSG2-3020R SBSG2-2030L | 1.5 | m2 | 30 | R | B4 | 12 | 35 | 60 | 61.6 | 40 | 26.6 | 21.2 |
| | | | 20 | L | B3 | 10 | 30 | 40 | 43.55 | 45 | 24.91 | 16.18 |
| SBSG2.5-3020R SBSG2.5-2030L | 1.5 | m2.5 | 30 | R | B4 | 15 | 45 | 75 | 77.09 | 50 | 33.86 | 26.56 |
| | | | 20 | L | B3 | 12 | 40 | 50 | 54.43 | 55 | 30.88 | 18.98 |
| SBSG3-3020R SBSG3-2030L | 1.5 | m3 | 30 | R | B4 | 16 | 50 | 90 | 92.21 | 55 | 35.34 | 26.66 |
| | | | 20 | L | B3 | 16 | 45 | 60 | 65.58 | 70 | 40.17 | 26.86 |
| SBSG4-3020R SBSG4-2030L | 1.5 | m4 | 30 | R | B4 | 20 | 70 | 120 | 122.85 | 75 | 47.49 | 37.14 |
| | | | 20 | L | B3 | 20 | 60 | 80 | 87.34 | 90 | 48.17 | 32.45 |
| SBSG2-4020R SBSG2-2040L | 2 | m2 | 40 | R | B4 | 12 | 40 | 80 | 80.99 | 45 | 32.26 | 25.99 |
| | | | 20 | L | B3 | 12 | 32 | 40 | 44.10 | 60 | 34.04 | 21.02 |
| SBSG2.5-4020R SBSG2.5-2040L | 2 | m2.5 | 40 | R | B4 | 15 | 50 | 100 | 101.27 | 55 | 39.65 | 31.27 |
| | | | 20 | L | B3 | 12 | 40 | 50 | 55.21 | 75 | 43.61 | 26.30 |
| SBSG3-4020R SBSG3-2040L | 2 | m3 | 40 | R | B4 | 20 | 60 | 120 | 121.48 | 65 | 45.76 | 36.48 |
| | | | 20 | L | B3 | 16 | 50 | 60 | 66.06 | 90 | 50.63 | 31.52 |
| SBSG4-4020R SBSG4-2040L | 2 | m4 | 40 | R | B4 | 20 | 70 | 160 | 162.07 | 80 | 53.69 | 42.07 |
| | | | 20 | L | B3 | 20 | 60 | 80 | 88.50 | 120 | 66.24 | 42.12 |
| SBSG2-4515R SBSG2-1545L | 3 | m2 | 45 | R | B4 | 12 | 40 | 90 | 90.67 | 40 | 30.29 | 26.01 |
| | | | 15 | L | B3 | 10 | 24 | 30 | 34.78 | 60 | 29.66 | 15.80 |
| SBSG2.5-4515R SBSG2.5-1545L | 3 | m2.5 | 45 | R | B4 | 15 | 50 | 112.5 | 113.32 | 50 | 38.25 | 32.47 |
| | | | 15 | L | B3 | 12 | 30 | 37.5 | 43.36 | 75 | 38.27 | 19.73 |
| SBSG3-4515R SBSG3-1545L | 3 | m3 | 45 | R | B4 | 20 | 60 | 135 | 135.99 | 55 | 40.59 | 33.98 |
| | | | 15 | L | B3 | 15 | 38 | 45 | 52.08 | 90 | 44.98 | 23.68 |

[Caution on Product Characteristics]

- ① Allowable torques shown in the table are the calculated values according to the assumed usage conditions. Please see page 451 for more details.
- ② Dimensions of the outside diameter, the overall length and crown to back length are all theoretical values, and some differences will occur due to the corner chamfering of the gear tips.
- ③ These gears produce axial thrust forces. Please see page 452 for more details.

Ground Spiral Bevel Gears



B4

| Hub width H | Length of bore I | Face width J | Holding surface dia. K | Allowable torque (N·m) | | Allowable torque (kgf·m) | | Backlash (mm) | Weight (kg) | Catalog No. |
|----------------|---------------------|-----------------|---------------------------|------------------------|--------------------|--------------------------|--------------------|------------------|----------------|--------------------------------|
| | | | | Bending strength | Surface durability | Bending strength | Surface durability | | | |
| 15 11.67 | 23 22 | 11 | 37.56 21.34 | 14.1 9.61 | 14.2 9.44 | 1.44 0.98 | 1.44 0.96 | 0.05~0.11 | 0.26 0.13 | SBSG2-3020R SBSG2-2030L |
| 18 14.17 | 30 28 | 15 | 45.61 27.42 | 29.0 19.8 | 29.7 19.8 | 2.96 2.02 | 3.03 2.02 | 0.06~0.12 | 0.55 0.28 | SBSG2.5-3020R SBSG2.5-2030L |
| 17 20 | 31 37 | 17 | 57.14 34.71 | 48.4 33.1 | 50.4 33.6 | 4.94 3.37 | 5.14 3.42 | 0.07~0.13 | 0.82 0.49 | SBSG3-3020R SBSG3-2030L |
| 25 23.33 | 40 43 | 20 | 78.59 46.89 | 106 72.2 | 113 75.3 | 10.8 7.36 | 11.5 7.68 | 0.10~0.16 | 1.90 1.05 | SBSG4-3020R SBSG4-2030L |
| 18 18 | 27 32 | 15 | 48.46 20.92 | 25.5 12.8 | 26.7 13.4 | 2.60 1.30 | 2.73 1.36 | 0.05~0.11 | 0.51 0.19 | SBSG2-4020R SBSG2-2040L |
| 20 22.5 | 34 40 | 20 | 59.28 20.56 | 51.7 25.9 | 55.1 27.6 | 5.27 2.64 | 5.62 2.81 | 0.06~0.12 | 1.06 0.42 | SBSG2.5-4020R SBSG2.5-2040L |
| 24 27.5 | 38 47 | 22 | 73.81 29.61 | 84.8 42.5 | 91.9 46.0 | 8.65 4.33 | 9.38 4.69 | 0.07~0.13 | 1.67 0.69 | SBSG3-4020R SBSG3-2040L |
| 28 35 | 45 62 | 28 | 102.39 42.78 | 195 97.9 | 217 109 | 19.9 9.98 | 22.2 11.1 | 0.10~0.16 | 3.33 1.53 | SBSG4-4020R SBSG4-2040L |
| 17 14 | 26 29 | 15 | 59.04 19.13 | 34.8 11.2 | 28.1 9.38 | 3.55 1.14 | 2.87 0.96 | 0.05~0.11 | 0.60 0.095 | SBSG2-4515R SBSG2-1545L |
| 22 17.5 | 35 37 | 20 | 72.84 20.51 | 59.0 18.9 | 48.3 16.1 | 6.01 1.93 | 4.93 1.64 | 0.06~0.12 | 1.21 0.19 | SBSG2.5-4515R SBSG2.5-1545L |
| 20 21.33 | 35 44 | 23 | 88.18 28.54 | 99.3 31.8 | 82.5 27.5 | 10.1 3.24 | 8.41 2.80 | 0.07~0.13 | 1.99 0.34 | SBSG3-4515R SBSG3-1545L |

[Caution on Secondary Operations]

- ① Please read "Caution on Performing Secondary Operations" (Page 452) when performing modifications and/or secondary operations for safety concerns. Haguruma Kobo, the KHK's system for quick modification of KHK stock gears is also available.
- ② Due to the gear teeth being induction hardened, no secondary operations can be performed on tooth areas including the bottom land (approx. 1 to 2 mm).

Spur Gears
Helical Gears
Internal Gears
Racks
CP Racks & Pinions
Miter Gears
Bevel Gears
Screw Gears
Worm Gear Pair
Bevel Gearboxes
Other Products