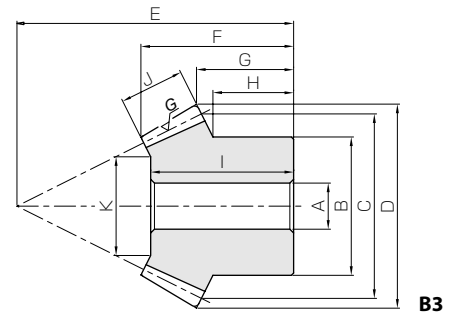




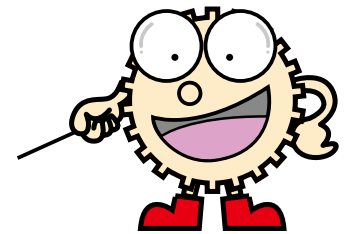
Specifications	
Precision grade	JIS B 1704 grade 2
Gear teeth	Gleason
Pressure angle	20°
Material	S45C
Heat treatment	Teeth induction hardened
Tooth hardness	45 ~ 55HRC




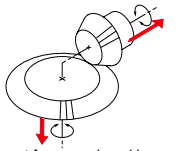







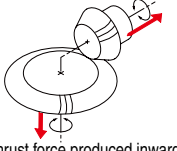
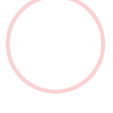
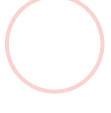





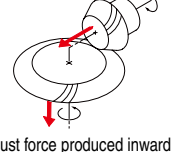




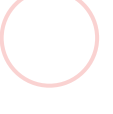

- Spur Gears
- Helical Gears
- Internal Gears
- Racks
- CP Racks & Pinions
- Miter Gears
- Bevel Gears
- Screw Gears
- Worm Gear Pair
- Bevel Gearboxes
- Other Products

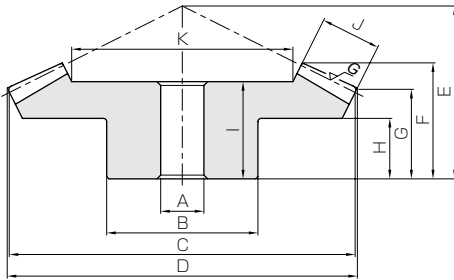
Catalog No. <small>New items indicated in blue letters</small>	Gear ratio	Module	No. of teeth	Helix angle	Direction of spiral	Shape	Bore		Hub dia.	Pitch dia.	Outside dia.	Mounting distance	Total length	Crown to back length
							A	B	C	D	E	F	G	
SBZG2-3020R SBZG2-2030L	1.5	m2	30	7°	R	B4	10	35	60	62.16	40	26.48	21.62	
20			L		B3	10	30	40	44.18	45	25.05	16.39		
SBZG2.5-3020R SBZG2.5-2030L		m2.5	30	7°	R	B4	15	45	75	77.77	50	33.69	27.08	
20			L		B3	12	35	50	55.23	55	31.05	19.24		
SBZG3-3020R SBZG3-2030L		2	m3	30	7°	R	B4	15	50	90	93.27	55	35.01	27.45
20				L		B3	15	45	60	66.32	70	40.50	27.11	
SBZG2-4020R SBZG2-2040L	m2		40	9°	R	B4	12	40	80	81.58	45	31.91	26.58	
20			L		B3	12	32	40	44.76	60	34.15	21.19		
SBZG2.5-4020R SBZG2.5-2040L	m2.5		40	9°	R	B4	15	50	100	102.01	55	39.16	32.01	
20			L		B3	12	40	50	55.99	75	43.77	26.50		
SBZG3-4020R SBZG3-2040L	m3	40	9°	R	B4	20	60	120	122.31	65	45.30	37.31		
20		L		B3	16	50	60	67.21	90	50.81	31.80			

- [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 It produces an axial thrust force, which has the same direction as straight bevel gears. For details, see page 700.



Performance Comparison

Gear Type	Bearing Design *	Interchangeability Mounting Distance	Precision JIS B 1704	Strength Bending Strength	Durability Surface Durability	Noise/Vibration Surface Roughness/Total Contact Ratio	Price for single item
Miter Gears  SM2-20	 No thrust force produced inward	 SUB, PB, SBZG	 grade 3	 24.2N · m / 12.2N · m	 2.92N · m / 1.46N · m	 3.2a/1.63	
Ground Zerol Miter Gears  SMZG2-20R/L	 No thrust force produced inward	 SB , SUB, PB	 grade 2	 26.0N · m / 13.1N · m	 18.4N · m / 9.18N · m	 0.4a/1.84	
Ground Spiral Miter Gears  MMSG2-20R/L	 Thrust force produced inward	 —	 grade 2	 51.8N · m / 25.9N · m	 87.2N · m / 43.6N · m	 0.4a/3.13	



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. New items indicated in blue letters
				Bending strength	Surface durability	Bending strength	Surface durability			
15 11.67	23 22	11 11	37.56 21.34	14.3 9.89	8.88 5.92	1.46 1.01	0.91 0.60	0.05~0.11	0.27 0.14	SBZG2-3020R SBZG2-2030L
18 12.5	30 28	15 15	45.61 27.42	29.4 20.4	18.8 12.5	3.00 2.08	1.92 1.28			0.06~0.12
17 20	31 37	17 17	57.14 34.71	51.7 35.8	31.6 21.1	5.27 3.65	3.22 2.15	0.07~0.13	0.84 0.50	SBZG3-3020R SBZG3-2030L
18 18	27 32	15 15	48.46 20.92	26.0 13.1	18.4 9.18	2.66 1.33	1.87 0.94			0.05~0.11
20 22.5	35 41	20 20	60.28 24.56	55.6 27.9	38.5 19.2	5.67 2.85	3.92 1.96	0.06~0.12	1.10 0.40	SBZG2.5-4020R SBZG2.5-2040L
24 27.5	38 47	22 22	73.81 29.61	96.3 48.4	62.8 31.4	9.82 4.93	6.40 3.20			0.07~0.13

[Caution on Secondary Operations]

- ① Please read "Cautions on Performing Secondary Operations" (Page 452) when performing modification 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 gear teeth induction hardened, no secondary operations can be performed on tooth areas including the bottom land (approx. 1 to 2 mm).

Spur
GearsHelical
GearsInternal
Gears

Racks

CP Racks
& PinionsMiter
GearsBevel
GearsScrew
GearsWorm
Gear PairBevel
GearboxesOther
Products