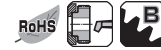


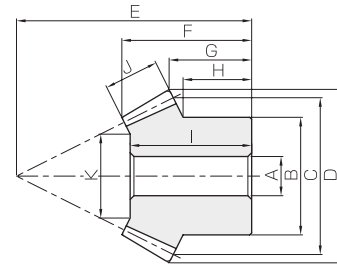


# SB · SBY Steel Bevel Gears

Module 1 ~ 8



Specifications	
Precision grade	JIS B 1704 grade 3
Gear teeth	Gleason
Pressure angle	20°
Material	S45C
Heat treatment	—
Tooth hardness	less than 194HB

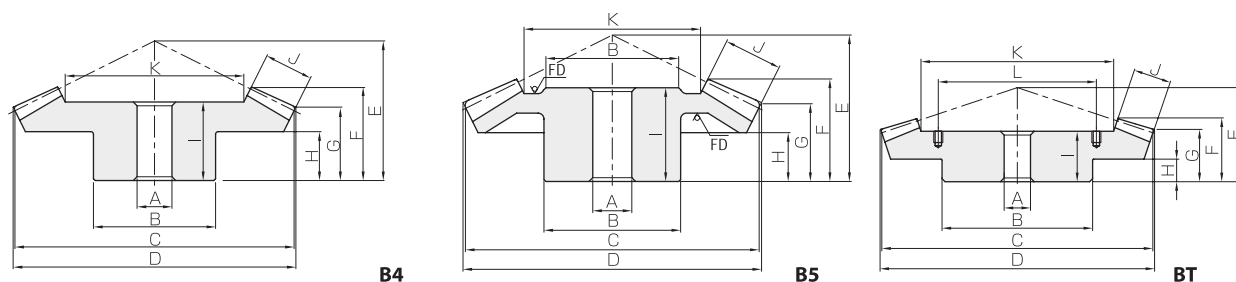


B3

Catalog No.	Gear ratio	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Mounting distance	Total length	Crown to back length	Hub width
					A <sub>H7</sub>	B	C	D	E	F	G	H
<b>SB1-4518</b> <b>SB1-1845</b>	2.5	<b>m1</b>	45	B4	8	30	45	45.46	23	16.95	14.57	10
			18	B3	6	15	18	20.57	32	16.34	10.02	8.9
<b>SB1.25-4518</b> <b>SB1.25-1845</b>		<b>m1.25</b>	45	B4	10	34	56.25	56.82	26	18.53	15.46	10
			18	B3	8	19	22.5	25.72	40	20.66	12.52	11.17
<b>SB1.5-4518</b> <b>SB1.5-1845</b>		<b>m1.5</b>	45	B4	10	36	67.5	68.18	30	21.1	17.35	10
			18	B3	8	23	27	30.86	45	21.97	12.02	10.45
<b>SB2-4518</b> <b>SB2-1845</b>		<b>m2</b>	45	B4	12	48	90	90.91	40	27.91	23.14	15
			18	B3	10	32	36	41.15	60	28.69	16.03	14.2
<b>SB2.5-4518</b> <b>SB2.5-1845</b>		<b>m2.5</b>	45	B4	15	55	112.5	113.64	50	35.06	28.92	18
			18	B3	12	40	45	51.44	72	33.31	17.04	14.75
<b>SB3-4518</b> <b>SB3-1845</b>		<b>m3</b>	45	B4	20	65	135	136.37	60	41.86	34.71	22
			18	B3	16	48	54	61.72	85	38.04	19.05	16.3
<b>SB4-4518</b> <b>SB4-1845</b>	<b>m4</b>	45	B4	20	80	180	181.82	75	51.16	41.28	24	
		18	B3	20	62	72	82.3	110	48.28	22.06	18	
<b>SB5-4518</b> <b>SB5-1845</b>	<b>m5</b>	45	B4	25	100	225	227.28	90	59.43	47.85	28	
		18	B3	20	80	90	102.87	135	55.82	25.07	20.5	
<b>SB1-4515</b> <b>SB1-1545</b>	3	<b>m1</b>	45	B4	8	30	45	45.37	17	11.77	10.06	5
			15	B3	6	12	15	17.67	29	12.51	6.95	6
<b>SB1.25-4515</b> <b>SB1.25-1545</b>		<b>m1.25</b>	45	B4	10	34	56.25	56.72	21	14.61	12.33	6
			15	B3	8	15	18.75	22.09	36	15.85	8.43	7.25
<b>SB1.5-4515</b> <b>SB1.5-1545</b>		<b>m1.5</b>	45	B4	10	36	67.5	68.06	28	20.44	17.59	11
			15	B3	8	18	22.5	26.54	47	23.19	13.92	12.5
<b>SB2-4515</b> <b>SB2-1545</b>		<b>m2</b>	45	B4	12	40	90	90.75	40	30.4	26.12	17
			15	B3	10	24	30	35.35	60	29.8	15.89	14
<b>SB2.5-4515</b> <b>SB2.5-1545</b>		<b>m2.5</b>	45	B4	15	50	112.5	113.43	50	38.35	32.65	22
			15	B3	12	30	37.5	44.18	75	38.41	19.86	17.5
<b>SB3-4515</b> <b>SB3-1545</b>		<b>m3</b>	45	B4	20	60	135	136.12	55	40.74	34.18	20
			15	B3	15	38	45	53.02	90	45.17	23.84	21.33
<b>SB4-4515</b> <b>SB4-1545</b>	<b>m4</b>	45	B5	20	80	180	181.5	70	50.79	42.24	24	
		15	B3	16	50	60	70.69	115	54.6	26.78	23.33	
<b>SB5-4515</b> <b>SB5-1545</b>	<b>m5</b>	45	B5	25	90	225	226.87	75	50.28	40.3	20	
		15	B3	20	60	75	88.37	145	67.19	34.73	30	
<b>SB6-4515</b> <b>SB6-1545</b>	<b>m6</b>	45	BT	30	160	270	272.24	100	72.62	58.36	30	
		15	B3	25	70	90	106.03	175	89.04	42.67	36.67	
<b>SBY8-4515</b> <b>SBY8-1545</b>	<b>m8</b>	45	BT	35	200	360	362.99	125	83.74	69.49	30	
		15	B3	30	100	120	141.39	230	99.93	53.56	46.67	

[Caution on Product Characteristics]

- ① The 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 For convenience in handling, BT Shaped Gears have tapped holes on their holding surface. To find the L dimensions and tap sizes, please refer to page 452.



\* FD has die-forged finish.

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 15.5	7	30.73 10.31	3.35 1.33	0.35 0.14	0.34 0.14	0.04 0.01	0.03~0.13	0.11 0.019	<b>SB1-4518</b> <b>SB1-1845</b>
16 19.5	9	37.86 12.16	6.67 2.65	0.72 0.29	0.68 0.27	0.07 0.03	0.04~0.14	0.17 0.038	<b>SB1.25-4518</b> <b>SB1.25-1845</b>
18 21	11	45 16.51	11.7 4.64	1.29 0.51	1.19 0.47	0.13 0.05	0.05~0.15	0.28 0.063	<b>SB1.5-4518</b> <b>SB1.5-1845</b>
25 27.5	14	62.24 23.11	26.8 10.7	3.05 1.22	2.74 1.09	0.31 0.12	0.06~0.16	0.65 0.16	<b>SB2-4518</b> <b>SB2-1845</b>
31 31.5	18	76.53 26.82	53.4 21.2	6.20 2.48	5.44 2.16	0.63 0.25	0.07~0.17	1.23 0.28	<b>SB2.5-4518</b> <b>SB2.5-1845</b>
37 36	21	92.96 33.41	90.5 36.0	10.7 4.29	9.23 3.67	1.09 0.44	0.08~0.18	2.05 0.46	<b>SB3-4518</b> <b>SB3-1845</b>
45 46	29	122.33 45.83	220 87.3	26.8 10.7	22.4 8.91	2.73 1.09	0.12~0.27	4.69 1.01	<b>SB4-4518</b> <b>SB4-1845</b>
51 52.5	34	156.56 56.9	411 164	51.8 20.7	41.9 16.7	5.28 2.11	0.14~0.34	8.31 1.95	<b>SB5-4518</b> <b>SB5-1845</b>
9 12	6	32.02 10.05	2.84 0.98	0.27 0.09	0.29 0.10	0.027 0.0091	0.03~0.13	0.078 0.095	<b>SB1-4515</b> <b>SB1-1545</b>
12 15	8	39.63 10.9	5.80 2.00	0.56 0.19	0.59 0.20	0.057 0.019	0.04~0.14	0.15 0.018	<b>SB1.25-4515</b> <b>SB1.25-1545</b>
17 22.5	10	46.58 14.75	10.3 3.56	1.02 0.34	1.05 0.36	0.10 0.035	0.05~0.15	0.25 0.041	<b>SB1.5-4515</b> <b>SB1.5-1545</b>
26 29	15	59.04 19.13	26.4 9.10	2.68 0.89	2.69 0.93	0.27 0.091	0.06~0.16	0.60 0.096	<b>SB2-4515</b> <b>SB2-1545</b>
35 37	20	72.84 20.51	53.6 18.5	5.55 1.85	5.46 1.89	0.57 0.19	0.07~0.17	1.22 0.19	<b>SB2.5-4515</b> <b>SB2.5-1545</b>
35 43	23	88.18 22.53	90.2 31.2	9.53 3.18	9.20 3.18	0.97 0.32	0.08~0.18	1.99 0.34	<b>SB3-4515</b> <b>SB3-1545</b>
45 52	30	118.09 32.26	211 72.8	23.0 7.67	21.5 7.43	2.35 0.78	0.12~0.27	3.89 0.77	<b>SB4-4515</b> <b>SB4-1545</b>
44 65	35	152.88 48.64	394 136	44.3 14.8	40.2 13.9	4.52 1.51	0.14~0.34	6.10 1.46	<b>SB5-4515</b> <b>SB5-1545</b>
62 86	50	169.26 49.77	751 259	87.0 39.9	76.6 26.4	8.87 4.06	0.16~0.36	18.0 2.61	<b>SB6-4515</b> <b>SB6-1545</b>
67 93	50	255.92 61.77	1470 506	179 59.7	150 51.6	18.3 6.09	0.20~0.45	36.4 5.80	<b>SBY8-4515</b> <b>SBY8-1545</b>

[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.