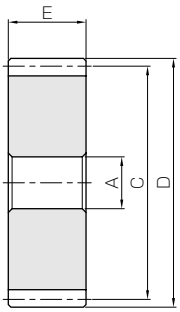
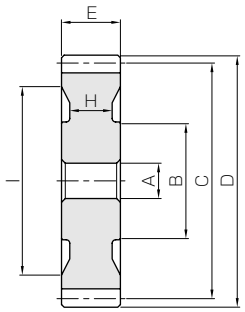
Specifications	
Precision grade	JIS grade N8 (JIS B1702-1: 1998) JIS grade 4 (JIS B1702: 1976)
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat treatment	—
Tooth hardness	less than 194HB



S5

Catalog No.	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Web thickness	Web O.D.
				A_{H7}	B	C	D	E	H	I
SSA1-20	***m*1**	20	S5	8	—	20	22	10	—	—
SSA1-24		24	S5	8	—	24	26	10	—	—
SSA1-25		25	S5	8	—	25	27	10	—	—
SSA1-28		28	S5	8	—	28	30	10	—	—
SSA1-30		30	S5	8	—	30	32	10	—	—
SSA1-32		32	S5	8	—	32	34	10	—	—
SSA1-35		35	S5	8	—	35	37	10	—	—
SSA1-36		36	S5	8	—	36	38	10	—	—
SSA1-40		40	S5	8	—	40	42	10	—	—
SSA1-45		45	S5	8	—	45	47	10	—	—
SSA1-48		48	S5	8	—	48	50	10	—	—
SSA1-50		50	S5	10	—	50	52	10	—	—
SSA1-55		55	S5	10	—	55	57	10	—	—
SSA1-56		56	S5	10	—	56	58	10	—	—
SSA1-60		60	S5	10	—	60	62	10	—	—
SSA1-70		70	S5	10	—	70	72	10	—	—
SSA1-80		80	S5	10	—	80	82	10	—	—
SSA1-100		100	S5	10	—	100	102	10	—	—
SSA1-120		120	S5	10	—	120	122	10	—	—
SSA1.5-20	***m*1.5**	20	S5	10	—	30	33	15	—	—
SSA1.5-24		24	S5	10	—	36	39	15	—	—
SSA1.5-25		25	S5	10	—	37.5	40.5	15	—	—
SSA1.5-28		28	S5	10	—	42	45	15	—	—
SSA1.5-30		30	S5	10	—	45	48	15	—	—
SSA1.5-32		32	S5	10	—	48	51	15	—	—
SSA1.5-35		35	S5	10	—	52.5	55.5	15	—	—
SSA1.5-36		36	S5	10	—	54	57	15	—	—
SSA1.5-40		40	S5	15	—	60	63	15	—	—
SSA1.5-45		45	S5	15	—	67.5	70.5	15	—	—
SSA1.5-48		48	S5	15	—	72	75	15	—	—
SSA1.5-50		50	S5	15	—	75	78	15	—	—
SSA1.5-55		55	S5	15	—	82.5	85.5	15	—	—
SSA1.5-56		56	S5	15	—	84	87	15	—	—
SSA1.5-60		60	S5	15	—	90	93	15	—	—
SSA1.5-70		70	S5	15	—	105	108	15	—	—
SSA1.5-80		80	S5	15	—	120	123	15	—	—
SSA1.5-100		100	S6	15	70	150	153	15	9	125

[Caution on Product Characteristics] ① The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see page 35 for more details.
② The backlash values shown in the table are the theoretical values for the backlash in the normal direction of a pair of identical gears in mesh.

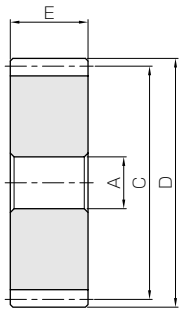


S6

Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash (mm)	Weight (kg)	Catalog No.
Bending strength	Surface durability	Bending strength	Surface durability			
5.75	0.33	0.59	0.033		0.021	**SSA1-20**
7.47	0.49	0.76	0.050		0.032	**SSA1-24**
7.91	0.54	0.81	0.055	0.08~0.18	0.035	**SSA1-25**
9.24	0.68	0.94	0.070		0.044	**SSA1-28**
10.1	0.79	1.03	0.081		0.052	**SSA1-30**
11.1	0.90	1.13	0.092		0.059	**SSA1-32**
12.4	1.09	1.27	0.11		0.072	**SSA1-35**
12.9	1.16	1.31	0.12	0.08~0.18	0.076	**SSA1-36**
14.7	1.45	1.50	0.15		0.095	**SSA1-40**
17.1	1.86	1.74	0.19		0.12	**SSA1-45**
18.5	2.13	1.89	0.22		0.14	**SSA1-48**
19.5	2.32	1.98	0.24		0.15	**SSA1-50**
21.8	2.83	2.23	0.29	0.08~0.18	0.18	**SSA1-55**
22.3	2.94	2.28	0.30		0.19	**SSA1-56**
24.2	3.40	2.47	0.35		0.22	**SSA1-60**
29.1	4.70	2.96	0.48		0.30	**SSA1-70**
33.9	6.23	3.46	0.63	0.08~0.18	0.39	**SSA1-80**
43.7	9.97	4.45	1.02		0.61	**SSA1-100**
53.5	14.7	5.45	1.50		0.88	**SSA1-120**
19.4	1.15	1.98	0.12	0.10~0.22	0.074	**SSA1.5-20**
25.2	1.73	2.57	0.18	0.12~0.26	0.11	**SSA1.5-24**
26.7	1.90	2.72	0.19	0.12~0.26	0.12	**SSA1.5-25**
31.2	2.41	3.18	0.25	0.12~0.26	0.15	**SSA1.5-28**
34.2	2.79	3.49	0.28	0.12~0.26	0.18	**SSA1.5-30**
37.3	3.19	3.80	0.33	0.12~0.26	0.20	**SSA1.5-32**
41.9	3.85	4.28	0.39	0.12~0.26	0.25	**SSA1.5-35**
43.5	4.09	4.43	0.42	0.12~0.26	0.26	**SSA1.5-36**
49.8	5.10	5.07	0.52	0.12~0.26	0.31	**SSA1.5-40**
57.7	6.53	5.88	0.67	0.14~0.32	0.40	**SSA1.5-45**
62.4	7.47	6.37	0.76	0.14~0.32	0.46	**SSA1.5-48**
65.7	8.15	6.69	0.83	0.14~0.32	0.50	**SSA1.5-50**
73.7	9.96	7.51	1.02	0.14~0.32	0.61	**SSA1.5-55**
75.3	10.4	7.68	1.06	0.14~0.32	0.63	**SSA1.5-56**
81.8	12.0	8.34	1.22	0.14~0.32	0.73	**SSA1.5-60**
98.0	16.6	10.0	1.69	0.14~0.32	1.00	**SSA1.5-70**
114	22.0	11.7	2.24	0.14~0.32	1.31	**SSA1.5-80**
147	35.5	15.0	3.62	0.18~0.38	1.72	**SSA1.5-100**

[Caution on Secondary Operations] ① Please read "Caution on Performing Secondary Operations" (Page 36) 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 Avoid performing secondary operations that narrow the tooth width as it affects precision and strength.

Specifications	
Precision grade	JIS grade N8 (JIS B1702-1: 1998) JIS grade 4 (JIS B1702: 1976)
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat treatment	—
Tooth hardness	less than 194HB



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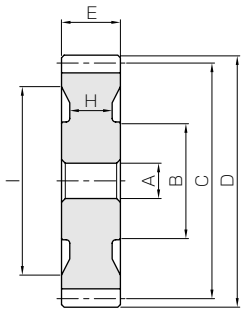
Catalog No.	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Web thickness	Web O.D.
				A_{H7}	B	C	D	E	H	I
SSA2-20	*m2*	20	S5	12	—	40	44	20	—	—
SSA2-24		24	S5	12	—	48	52	20	—	—
SSA2-25		25	S5	12	—	50	54	20	—	—
SSA2-28		28	S5	15	—	56	60	20	—	—
SSA2-30		30	S5	15	—	60	64	20	—	—
SSA2-32		32	S5	15	—	64	68	20	—	—
SSA2-35		35	S5	15	—	70	74	20	—	—
SSA2-36		36	S5	15	—	72	76	20	—	—
SSA2-40		40	S5	18	—	80	84	20	—	—
SSA2-45		45	S5	18	—	90	94	20	—	—
SSA2-48		48	S5	18	—	96	100	20	—	—
SSA2-50		50	S5	18	—	100	104	20	—	—
SSA2-55		55	S5	18	—	110	114	20	—	—
SSA2-56		56	S5	18	—	112	116	20	—	—
SSA2-60		60	S5	18	—	120	124	20	—	—
SSA2-70		70	S5	18	—	140	144	20	—	—
SSA2-80		80	S6	18	70	160	164	20	12	136
SSA2-100		100	S6	18	90	200	204	20	12	176
SSA2.5-20	*m2.5*	20	S5	15	—	50	55	25	—	—
SSA2.5-24		24	S5	15	—	60	65	25	—	—
SSA2.5-25		25	S5	15	—	62.5	67.5	25	—	—
SSA2.5-28		28	S5	18	—	70	75	25	—	—
SSA2.5-30		30	S5	18	—	75	80	25	—	—
SSA2.5-32		32	S5	18	—	80	85	25	—	—
SSA2.5-35		35	S5	18	—	87.5	92.5	25	—	—
SSA2.5-36		36	S5	18	—	90	95	25	—	—
SSA2.5-40		40	S5	22	—	100	105	25	—	—
SSA2.5-45		45	S5	22	—	112.5	117.5	25	—	—
SSA2.5-48		48	S5	22	—	120	125	25	—	—
SSA2.5-50		50	S5	22	—	125	130	25	—	—
SSA2.5-55		55	S5	22	—	137.5	142.5	25	—	—
SSA2.5-56		56	S5	22	—	140	145	25	—	—
SSA2.5-60		60	S6	22	70	150	155	25	15	121
SSA2.5-70		70	S6	22	80	175	180	25	15	146
SSA2.5-80		80	S6	22	90	200	205	25	15	171

[Caution on Product Characteristics] ① The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see page 35 for more details.
② The backlash values shown in the table are the theoretical values for the backlash in the normal direction of a pair of identical gears in mesh.



S6

Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash (mm)	Weight (kg)	Catalog No.
Bending strength	Surface durability	Bending strength	Surface durability			
46.0	2.83	4.69	0.29	0.12~0.26	0.18	**SSA2-20**
59.8	4.24	6.09	0.43	0.14~0.30	0.27	**SSA2-24**
63.3	4.64	6.45	0.47	0.14~0.30	0.29	**SSA2-25**
73.9	5.89	7.54	0.60	0.14~0.30	0.36	**SSA2-28**
81.1	6.80	8.27	0.69	0.14~0.30	0.42	**SSA2-30**
88.4	7.78	9.01	0.79	0.14~0.30	0.48	**SSA2-32**
99.3	9.39	10.1	0.96	0.14~0.30	0.58	**SSA2-35**
103	9.96	10.5	1.02	0.14~0.30	0.61	**SSA2-36**
118	12.5	12.0	1.27	0.14~0.30	0.75	**SSA2-40**
137	16.0	13.9	1.63	0.18~0.36	0.96	**SSA2-45**
148	18.3	15.1	1.87	0.18~0.36	1.10	**SSA2-48**
156	19.9	15.9	2.03	0.18~0.36	1.19	**SSA2-50**
175	24.4	17.8	2.48	0.18~0.36	1.45	**SSA2-55**
179	25.3	18.2	2.58	0.18~0.36	1.51	**SSA2-56**
194	29.3	19.8	2.99	0.18~0.36	1.74	**SSA2-60**
232	40.8	23.7	4.16	0.18~0.36	2.38	**SSA2-70**
271	54.3	27.7	5.53	0.18~0.36	2.55	**SSA2-80**
291	72.7	29.7	7.42	0.20~0.44	3.90	**SSA2-100**
89.8	5.66	9.16	0.58	0.14~0.28	0.35	**SSA2.5-20**
117	8.47	11.9	0.86	0.16~0.34	0.52	**SSA2.5-24**
124	9.26	12.6	0.94	0.16~0.34	0.57	**SSA2.5-25**
144	11.7	14.7	1.20	0.16~0.34	0.71	**SSA2.5-28**
159	13.6	16.2	1.39	0.16~0.34	0.82	**SSA2.5-30**
173	15.6	17.6	1.59	0.16~0.34	0.94	**SSA2.5-32**
194	18.8	19.8	1.92	0.16~0.34	1.13	**SSA2.5-35**
201	20.0	20.5	2.04	0.16~0.34	1.20	**SSA2.5-36**
230	24.9	23.5	2.54	0.16~0.34	1.47	**SSA2.5-40**
267	31.9	27.2	3.26	0.18~0.40	1.88	**SSA2.5-45**
289	36.7	29.5	3.74	0.18~0.40	2.14	**SSA2.5-48**
304	40.0	31.0	4.08	0.18~0.40	2.33	**SSA2.5-50**
341	49.1	34.8	5.01	0.18~0.40	2.84	**SSA2.5-55**
349	51.0	35.6	5.20	0.18~0.40	2.95	**SSA2.5-56**
379	59.1	38.6	6.03	0.18~0.40	2.93	**SSA2.5-60**
454	82.1	46.3	8.37	0.18~0.40	3.89	**SSA2.5-70**
441	90.9	45.0	9.27	0.18~0.40	4.99	**SSA2.5-80**

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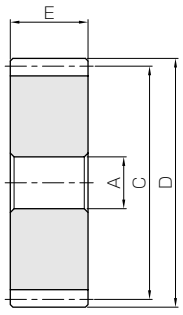
②Avoid performing secondary operations that narrow the tooth width as it affects precision and strength.

Specifications	
Precision grade	JIS grade N8 (JIS B1702-1: 1998) JIS grade 4 (JIS B1702: 1976)
Gear teeth	Standard full depth
Pressure angle	20°
Material	S45C
Heat treatment	—
Tooth hardness	less than 194HB



S5

Catalog No.	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Web thickness	Web O.D.
				A_{H7}	B	C	D	E	H	I
SSA3-20		20	S5	15	—	60	66	30	—	—
SSA3-24		24	S5	15	—	72	78	30	—	—
SSA3-25		25	S5	15	—	75	81	30	—	—
SSA3-28		28	S5	20	—	84	90	30	—	—
SSA3-30		30	S5	20	—	90	96	30	—	—
SSA3-32		32	S5	20	—	96	102	30	—	—
SSA3-35		35	S5	20	—	105	111	30	—	—
SSA3-36		36	S5	20	—	108	114	30	—	—
SSA3-40	***m3***	40	S5	25	—	120	126	30	—	—
SSA3-45		45	S5	25	—	135	141	30	—	—
SSA3-48		48	S5	25	—	144	150	30	—	—
SSA3-50		50	S6	25	70	150	156	30	18	116
SSA3-55		55	S6	25	80	165	171	30	18	131
SSA3-56		56	S6	25	80	168	174	30	18	134
SSA3-60		60	S6	25	90	180	186	30	18	146
SSA3-70		70	S6	25	90	210	216	30	18	176
SSA3-80		80	S6	25	90	240	246	30	18	205
SSA4-20		20	S5	20	—	80	88	40	—	—
SSA4-24		24	S5	20	—	96	104	40	—	—
SSA4-25		25	S5	20	—	100	108	40	—	—
SSA4-28		28	S5	25	—	112	120	40	—	—
SSA4-30		30	S5	25	—	120	128	40	—	—
SSA4-32		32	S5	25	—	128	136	40	—	—
SSA4-35		35	S5	25	—	140	148	40	—	—
SSA4-36		36	S5	25	—	144	152	40	—	—
SSA4-40	***m4***	40	S6	30	80	160	168	40	26	118
SSA4-45		45	S6	30	100	180	188	40	26	138
SSA4-48		48	S6	30	100	192	200	40	26	150
SSA4-50		50	S6	30	100	200	208	40	26	158
SSA4-55		55	S6	30	110	220	228	40	26	178
SSA4-56		56	S6	30	110	224	232	40	26	182
SSA4-60		60	S6	30	120	240	248	40	26	198
SSA5-20		20	S5	22	—	100	110	50	—	—
SSA5-24		24	S5	22	—	120	130	50	—	—
SSA5-25		25	S5	22	—	125	135	50	—	—
SSA5-28		28	S5	25	—	140	150	50	—	—
SSA5-30		30	S5	25	—	150	160	50	—	—
SSA5-32		32	S5	25	—	160	170	50	—	—
SSA5-35		35	S5	25	—	175	185	50	—	—
SSA5-36		36	S5	25	—	180	190	50	—	—
SSA5-40	***m5***	40	S6	30	100	200	210	50	36	160
SSA5-45		45	S6	30	120	225	235	50	36	185
SSA5-48		48	S6	30	120	240	250	50	36	200
SSA5-50		50	S6	30	130	250	260	50	36	210

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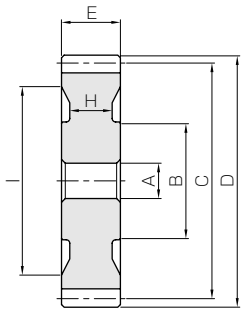
② The backlash values shown in the table are the theoretical values for the backlash in the normal direction of a pair of identical gears in mesh.



S6

Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash (mm)	Weight (kg)	Catalog No.
Bending strength	Surface durability	Bending strength	Surface durability			
155	9.95	15.8	1.02	0.14~0.32	0.62	**SSA3-20**
202	14.9	20.6	1.52	0.18~0.38	0.92	**SSA3-24**
214	16.3	21.8	1.66	0.18~0.38	1.00	**SSA3-25**
250	20.7	25.4	2.11	0.18~0.38	1.23	**SSA3-28**
274	24.0	27.9	2.44	0.18~0.38	1.42	**SSA3-30**
298	27.4	30.4	2.80	0.18~0.38	1.63	**SSA3-32**
335	33.1	34.2	3.38	0.18~0.38	1.97	**SSA3-35**
348	35.2	35.5	3.59	0.18~0.38	2.08	**SSA3-36**
398	44.0	40.6	4.49	0.18~0.38	2.55	**SSA3-40**
461	56.6	47	5.78	0.20~0.44	3.26	**SSA3-45**
500	65.0	50.9	6.63	0.20~0.44	3.72	**SSA3-48**
525	70.9	53.6	7.23	0.20~0.44	3.60	**SSA3-50**
590	86.9	60.1	8.86	0.20~0.44	4.34	**SSA3-55**
602	90.3	61.4	9.21	0.20~0.44	4.47	**SSA3-56**
654	105	66.7	10.7	0.20~0.44	5.14	**SSA3-60**
654	121	66.6	12.4	0.20~0.44	6.64	**SSA3-70**
763	162	77.8	16.5	0.20~0.44	8.37	**SSA3-80**
368	24.3	37.5	2.48	0.18~0.38	1.48	**SSA4-20**
478	36.4	48.8	3.72	0.20~0.44	2.17	**SSA4-24**
506	39.9	51.6	4.07	0.20~0.44	2.37	**SSA4-25**
591	50.6	60.3	5.16	0.20~0.44	2.94	**SSA4-28**
649	58.7	66.2	5.98	0.20~0.44	3.40	**SSA4-30**
707	67.4	72.1	6.87	0.20~0.44	3.89	**SSA4-32**
795	81.6	81.1	8.32	0.20~0.44	4.68	**SSA4-35**
825	86.7	84.1	8.84	0.20~0.44	4.96	**SSA4-36**
943	109	96.2	11.1	0.20~0.44	5.70	**SSA4-40**
1090	139	112	14.2	0.24~0.52	7.29	**SSA4-45**
987	133	101	13.6	0.24~0.52	8.12	**SSA4-48**
1040	146	106	14.8	0.24~0.52	8.70	**SSA4-50**
1160	179	119	18.2	0.24~0.52	10.4	**SSA4-55**
1190	186	121	18.9	0.24~0.52	10.7	**SSA4-56**
1290	215	132	22.0	0.24~0.52	12.3	**SSA4-60**
718	48.6	73.3	4.96	0.20~0.44	2.93	**SSA5-20**
934	73.0	95.2	7.45	0.24~0.50	4.29	**SSA5-24**
989	80.0	101	8.16	0.24~0.50	4.67	**SSA5-25**
1160	102	118	10.4	0.24~0.50	5.85	**SSA5-28**
1270	118	129	12.1	0.24~0.50	6.74	**SSA5-30**
1380	136	141	13.8	0.24~0.50	7.70	**SSA5-32**
1550	164	158	16.7	0.24~0.50	9.25	**SSA5-35**
1610	174	164	17.8	0.24~0.50	9.80	**SSA5-36**
1540	182	157	18.5	0.24~0.50	11.1	**SSA5-40**
1780	234	182	23.9	0.28~0.58	14.0	**SSA5-45**
1930	269	197	27.5	0.28~0.58	15.7	**SSA5-48**
2030	294	207	30.0	0.28~0.58	17.1	**SSA5-50**

[Caution on Secondary Operations] ① Please read "Caution on Performing Secondary Operations" (Page 36) 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.
②Avoid performing secondary operations that narrow the tooth width as it affects precision and strength.