



# SS

# Steel Spur Gears

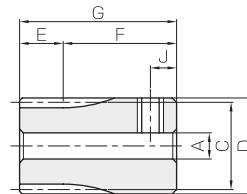


## Module 0.5



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

\* The precision grade of products with a module of less than 0.8 is equivalent to the value shown in the table.

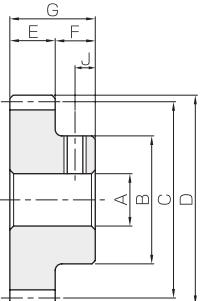


S3T

Catalog No.	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length	Keyway
				A <sub>H7</sub>	B	C	D	E	F	G	Width×Depth
<b>SS0.5-15A</b>	m0.5	15	S3T	3	8.5	7.5	8.5	5	11	16	—
<b>SS0.5-16A</b>		16	S3T	3	9	8	9	5	11	16	—
<b>SS0.5-17A</b>		17	S3T	3	9.5	8.5	9.5	5	11	16	—
<b>SS0.5-18A</b>		18	S3T	4	10	9	10	5	11	16	—
<b>SS0.5-19A</b>		19	S3T	4	10.5	9.5	10.5	5	11	16	—
<b>SS0.5-20A</b>		20	S3T	3	11	10	11	5	11	16	—
<b>SS0.5-20B</b>			S3T	4							—
<b>SS0.5-21A</b>		21	S3T	4	11.5	10.5	11.5	5	11	16	—
<b>SS0.5-22A</b>		22	S3T	4	12	11	12	5	11	16	—
<b>SS0.5-23A</b>		23	S3T	4	12.5	11.5	12.5	5	11	16	—
<b>SS0.5-24A</b>		24	S3T	4							—
<b>SS0.5-24B</b>			S3T	5							—
<b>SS0.5-25A</b>		25	S3T	4							—
<b>SS0.5-25B</b>			S3T	5	13.5	12.5	13.5	5	11	16	—
<b>SS0.5-26A</b>		26	S3T	4	14	13	14	5	11	16	—
<b>SS0.5-27A</b>		27	S3T	4	14.5	13.5	14.5	5	11	16	—
<b>SS0.5-28A</b>		28	S1T	4	12	14	15	5	7	12	—
<b>SS0.5-29A</b>		29	S1T	4	12	14.5	15.5	5	7	12	—
<b>SS0.5-30A</b>		30	S1T	4							—
<b>SS0.5-30B</b>			S1T	5	13	15	16	5	7	12	—
<b>SS0.5-30C</b>			S1T	6							—
<b>SS0.5-32A</b>		32	S1T	5	14	16	17	5	7	12	—
<b>SS0.5-34A</b>		34	S1T	5	15	17	18	5	7	12	—
<b>SS0.5-35A</b>		35	S1T	5	15	17.5	18.5	5	7	12	—
<b>SS0.5-36A</b>		36	S1T	5	16	18	19	5	7	12	—
<b>SS0.5-38A</b>		38	S1T	5	16	19	20	5	7	12	—
<b>SS0.5-40A</b>		40	S1T	5							—
<b>SS0.5-40B</b>			S1T	6	18	20	21	5	7	12	—
<b>SS0.5-42A</b>		42	S1T	5	18	21	22	5	7	12	—
<b>SS0.5-44A</b>		44	S1T	5	20	22	23	5	7	12	—
<b>SS0.5-45A</b>		45	S1T	5	20	22.5	23.5	5	7	12	—
<b>SS0.5-46A</b>		46	S1T	5	20	23	24	5	7	12	—
<b>SS0.5-48A</b>		48	S1T	5	22	24	25	5	7	12	—
<b>SS0.5-50A</b>		50	S1T	5							—
<b>SS0.5-50B</b>			S1T	6	22	25	26	5	7	12	—
<b>SS0.5-52A</b>		52	S1T	5	22	26	27	5	7	12	—
<b>SS0.5-54A</b>		54	S1T	5	25	27	28	5	7	12	—
<b>SS0.5-55A</b>		55	S1T	5	25	27.5	28.5	5	7	12	—
<b>SS0.5-56A</b>		56	S1T	5	25	28	29	5	7	12	—
<b>SS0.5-58A</b>		58	S1T	5	25	29	30	5	7	12	—
<b>SS0.5-60A</b>		60	S1T	6	28	30	31	5	7	12	—
<b>SS0.5-60B</b>			S1T	8							—
<b>SS0.5-62A</b>		62	S1T	6	28	31	32	5	7	12	—
<b>SS0.5-64A</b>		64	S1T	6	28	32	33	5	7	12	—
<b>SS0.5-65A</b>		65	S1T	6	28	32.5	33.5	5	7	12	—
<b>SS0.5-66A</b>		66	S1T	6	28	33	34	5	7	12	—
<b>SS0.5-68A</b>		68	S1T	6	28	34	35	5	7	12	—
<b>SS0.5-70A</b>		70	S1T	6	28	35	36	5	7	12	—
<b>SS0.5-70B</b>			S1T	8							—
<b>SS0.5-72A</b>		72	S1T	6	28	36	37	5	7	12	—

[Caution on Product Characteristics]

- ① For products with a tapped hole, a set screw is included.
- ② The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see page 35 for more details.
- ③ 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.
- ④ If the bore size is less than  $\phi$  4, the tolerance is H8. If the bore size is  $\phi$  5 or  $\phi$  6, and the hole length exceeds 3 times of the bore size, the tolerance is also H8.



S1T

Set Screw		Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash (mm)	Weight (kg)	Catalog No.
Size	J	Bending strength	Surface durability	Bending strength	Surface durability			
M3	2.5	0.46	0.022	0.047	0.0022	0~0.10	0.0056	<b>SS0.5-15A</b>
M3	2.5	0.51	0.025	0.052	0.0025	0~0.10	0.0064	<b>SS0.5-16A</b>
M3	2.5	0.56	0.028	0.057	0.0029	0~0.10	0.0073	<b>SS0.5-17A</b>
M3	2.5	0.61	0.032	0.063	0.0033	0~0.10	0.0076	<b>SS0.5-18A</b>
M3	2.5	0.67	0.036	0.068	0.0036	0~0.10	0.0085	<b>SS0.5-19A</b>
M3	2.5	0.72	0.040	0.073	0.0041	0~0.10	0.010	<b>SS0.5-20A</b>
M3	2.5	0.77	0.044	0.079	0.0045	0~0.10	0.011	<b>SS0.5-21A</b>
M3	2.5	0.83	0.049	0.084	0.0050	0~0.10	0.012	<b>SS0.5-22A</b>
M3	2.5	0.88	0.054	0.090	0.0055	0~0.10	0.013	<b>SS0.5-23A</b>
M3	2.5	0.93	0.059	0.095	0.0060	0~0.10	0.014	<b>SS0.5-24A</b>
M4	3	0.93	0.059	0.095	0.0060	0~0.10	0.013	<b>SS0.5-24B</b>
M3	2.5	0.99	0.064	0.10	0.0065	0~0.10	0.015	<b>SS0.5-25A</b>
M4	3	0.99	0.064	0.10	0.0065	0~0.10	0.014	<b>SS0.5-25B</b>
M3	2.5	1.04	0.069	0.11	0.0071	0~0.10	0.017	<b>SS0.5-26A</b>
M3	2.5	1.10	0.075	0.11	0.0076	0~0.10	0.018	<b>SS0.5-27A</b>
M3	3.5	1.16	0.081	0.12	0.0082	0~0.10	0.011	<b>SS0.5-28A</b>
M3	3.5	1.21	0.087	0.12	0.0088	0~0.10	0.011	<b>SS0.5-29A</b>
M3	3.5						0.013	<b>SS0.5-30A</b>
M4	3.5	1.27	0.093	0.13	0.0095	0~0.10	0.012	<b>SS0.5-30B</b>
M4	3.5	1.27	0.093	0.13	0.0095	0~0.10	0.011	<b>SS0.5-30C</b>
M4	3.5	1.38	0.11	0.14	0.011	0~0.10	0.014	<b>SS0.5-32A</b>
M4	3.5	1.50	0.12	0.15	0.012	0~0.10	0.016	<b>SS0.5-34A</b>
M4	3.5	1.55	0.13	0.16	0.013	0~0.10	0.017	<b>SS0.5-35A</b>
M4	3.5	1.61	0.14	0.16	0.014	0~0.10	0.019	<b>SS0.5-36A</b>
M4	3.5	1.73	0.15	0.18	0.015	0~0.10	0.020	<b>SS0.5-38A</b>
M4	3.5	1.84	0.17	0.19	0.017	0~0.10	0.024	<b>SS0.5-40A</b>
M4	3.5	1.84	0.17	0.19	0.017	0~0.10	0.023	<b>SS0.5-40B</b>
M4	3.5	1.96	0.19	0.20	0.019	0~0.10	0.025	<b>SS0.5-42A</b>
M4	3.5	2.08	0.20	0.21	0.021	0~0.10	0.030	<b>SS0.5-44A</b>
M4	3.5	2.14	0.21	0.22	0.022	0~0.10	0.030	<b>SS0.5-45A</b>
M4	3.5	2.19	0.22	0.22	0.023	0~0.10	0.031	<b>SS0.5-46A</b>
M4	3.5	2.31	0.25	0.24	0.025	0~0.10	0.036	<b>SS0.5-48A</b>
M4	3.5	2.43	0.27	0.25	0.027	0~0.10	0.038	<b>SS0.5-50A</b>
M4	3.5	2.43	0.27	0.25	0.027	0~0.10	0.037	<b>SS0.5-50B</b>
M4	3.5	2.55	0.29	0.26	0.030	0~0.10	0.039	<b>SS0.5-52A</b>
M4	3.5	2.67	0.32	0.27	0.032	0~0.10	0.047	<b>SS0.5-54A</b>
M4	3.5	2.73	0.33	0.28	0.033	0~0.10	0.048	<b>SS0.5-55A</b>
M4	3.5	2.79	0.34	0.28	0.035	0~0.10	0.048	<b>SS0.5-56A</b>
M4	3.5	2.91	0.37	0.30	0.037	0~0.10	0.050	<b>SS0.5-58A</b>
M4	3.5	3.03	0.39	0.31	0.040	0~0.10	0.058	<b>SS0.5-60A</b>
M5	3.5						0.055	<b>SS0.5-60B</b>
M4	3.5	3.15	0.42	0.32	0.043	0~0.10	0.060	<b>SS0.5-62A</b>
M4	3.5	3.27	0.45	0.33	0.046	0~0.10	0.062	<b>SS0.5-64A</b>
M4	3.5	3.33	0.47	0.34	0.048	0~0.10	0.063	<b>SS0.5-65A</b>
M4	3.5	3.39	0.48	0.35	0.049	0~0.10	0.064	<b>SS0.5-66A</b>
M4	3.5	3.51	0.51	0.36	0.052	0~0.10	0.066	<b>SS0.5-68A</b>
M4	3.5	3.63	0.55	0.37	0.056	0~0.10	0.068	<b>SS0.5-70A</b>
M5	3.5						0.065	<b>SS0.5-70B</b>
M4	3.5	3.75	0.58	0.38	0.059	0~0.10	0.070	<b>SS0.5-72A</b>

[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.



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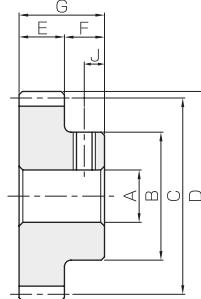
# Steel Spur Gears



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

\* The precision grade of products with a module of less than 0.8 is equivalent to the value shown in the table.

## Module 0.5



S1T

Catalog No.	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length	Keyway
				A <sub>H7</sub>	B	C	D	E	F	G	Width×Depth
<b>SS0.5-75A</b>	m0.5	75	S1T	6	28	37.5	38.5	5	7	12	—
<b>SS0.5-76A</b>		76	S1T	6	28	38	39	5	7	12	—
<b>SS0.5-80A</b>		80	S1T	6	28	40	41	5	7	12	—
<b>SS0.5-80B</b>		80	S1T	8	28	40	41	5	7	12	—
<b>SS0.5-84A</b>		84	S1T	8	28	42	43	5	7	12	—
<b>SS0.5-85A</b>		85	S1T	8	28	42.5	43.5	5	7	12	—
<b>SS0.5-88A</b>		88	S1T	8	28	44	45	5	7	12	—
<b>SS0.5-90A</b>		90	S1T	8	28	45	46	5	7	12	—
<b>SS0.5-95A</b>		95	S1T	8	28	47.5	48.5	5	7	12	—
<b>SS0.5-96A</b>		96	S1T	8	28	48	49	5	7	12	—
<b>SS0.5-100A</b>		100	S1T	8	28	50	51	5	7	12	—
<b>SS0.5-105A</b>		105	S1T	8	28	52.5	53.5	5	7	12	—
<b>SS0.5-110A</b>		110	S1T	8	28	55	56	5	7	12	—
<b>SS0.5-115A</b>		115	S1T	8	28	57.5	58.5	5	7	12	—
<b>SS0.5-120A</b>		120	S1T	8	28	60	61	5	7	12	—

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- ③ 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.
- ④ If the bore size is less than  $\phi$  4, the tolerance is H8. If the bore size is  $\phi$  5 or  $\phi$  6, and the hole length exceeds 3 times of the bore size, the tolerance is also H8.

Set Screw		Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash (mm)	Weight (kg)	Catalog No.
Size	J	Bending strength	Surface durability	Bending strength	Surface durability			
M4	3.5	3.93	0.63	0.40	0.064	0~0.10	0.074	<b>SS0.5-75A</b>
M4	3.5	3.99	0.65	0.41	0.066	0~0.10	0.075	<b>SS0.5-76A</b>
M4	3.5	4.24	0.72	0.43	0.074	0~0.10	0.079	<b>SS0.5-80A</b>
M5	3.5	4.24	0.72	0.43	0.074	0~0.10	0.077	<b>SS0.5-80B</b>
M5	3.5	4.48	0.80	0.46	0.082	0~0.10	0.082	<b>SS0.5-84A</b>
M5	3.5	4.54	0.82	0.46	0.084	0~0.10	0.083	<b>SS0.5-85A</b>
M5	3.5	4.72	0.89	0.48	0.090	0~0.10	0.087	<b>SS0.5-88A</b>
M5	3.5	4.85	0.93	0.49	0.095	0~0.10	0.090	<b>SS0.5-90A</b>
M5	3.5	5.15	1.04	0.53	0.11	0~0.10	0.097	<b>SS0.5-95A</b>
M5	3.5	5.21	1.06	0.53	0.11	0~0.10	0.099	<b>SS0.5-96A</b>
M5	3.5	5.46	1.16	0.56	0.12	0~0.10	0.10	<b>SS0.5-100A</b>
M5	3.5	5.76	1.28	0.59	0.13	0~0.10	0.11	<b>SS0.5-105A</b>
M5	3.5	6.07	1.42	0.62	0.14	0~0.10	0.12	<b>SS0.5-110A</b>
M5	3.5	6.38	1.56	0.65	0.16	0~0.10	0.13	<b>SS0.5-115A</b>
M5	3.5	6.68	1.70	0.68	0.17	0~0.10	0.14	<b>SS0.5-120A</b>

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