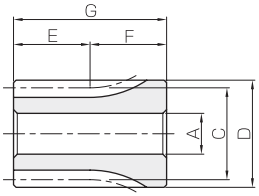
SS

Steel Spur Gears

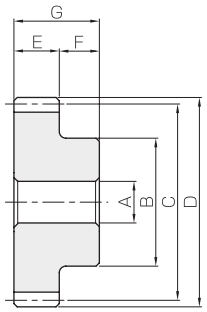
Module 1.5



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



S3



S1

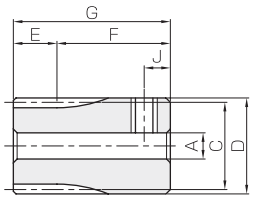
Catalog No.	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length	Web thickness	Web O.D.	Keyway
				A_{H7}	B	C	D	E	F	G	H	I	Width×Depth
SS1.5-12	***m*1.5**	12	S3	8	21	18	21	15	15	30	—	—	—
SS1.5-12A			S3T	6									—
SS1.5-13		13	S3	8	22.5	19.5	22.5	15	15	30	—	—	—
SS1.5-13A			S3T	6									—
SS1.5-14		14	S1	8	16	21	24	15	10	25	—	—	—
SS1.5-14A			S1T	6									—
SS1.5-14B			S1T	8									—
SS1.5-15		15	S1	8	18	22.5	25.5	15	10	25	—	—	—
SS1.5-15A			S1T	6									—
SS1.5-15B			S1T	8									—
SS1.5-16		16	S1	8	20	24	27	15	10	25	—	—	—
SS1.5-16A			S1T	6									—
SS1.5-16B			S1T	8									—
SS1.5-17		17	S1	8	21	25.5	28.5	15	10	25	—	—	—
SS1.5-17A			S1T	8									—
SS1.5-18		18	S1	8	22	27	30	15	10	25	—	—	—
SS1.5-18A			S1T	8									—
SS1.5-18B			S1K	10									4 x 1.8
SS1.5-19		19	S1	8	23	28.5	31.5	15	10	25	—	—	—
SS1.5-19A			S1T	8									—
SS1.5-20		20	S1	8	24	30	33	15	10	25	—	—	—
SS1.5-20A			S1T	6									—
SS1.5-20B			S1T	8									—
SS1.5-20C			S1K	10									4 x 1.8
SS1.5-21		21	S1	8	25	31.5	34.5	15	10	25	—	—	—
SS1.5-21A			S1T	8									—
SS1.5-21B			S1K	10									4 x 1.8
SS1.5-22		22	S1	8	26	33	36	15	10	25	—	—	—
SS1.5-22A			S1K	10									4 x 1.8
SS1.5-23		23	S1	8	27	34.5	37.5	15	10	25	—	—	—
SS1.5-23A			S1K	10									4 x 1.8
SS1.5-24		24	S1	8	28	36	39	15	10	25	—	—	—
SS1.5-24A			S1T	8									—
SS1.5-24B			S1K	10									4 x 1.8
SS1.5-24C			S1K	12									4 x 1.8
SS1.5-25		25	S1	8	30	37.5	40.5	15	10	25	—	—	—
SS1.5-25A			S1T	8									—
SS1.5-25B			S1K	10									4 x 1.8
SS1.5-25C			S1K	12									4 x 1.8
SS1.5-26		26	S1	10	32	39	42	15	10	25	—	—	—
SS1.5-26A			S1K	12									4 x 1.8
SS1.5-27		27	S1	10	34	40.5	43.5	15	10	25	—	—	—
SS1.5-27A			S1K	12									4 x 1.8
SS1.5-28		28	S1	10	36	42	45	15	10	25	—	—	—
SS1.5-28A			S1K	12									4 x 1.8
SS1.5-29		29	S1	10	37	43.5	46.5	15	10	25	—	—	—
SS1.5-29A			S1K	12									4 x 1.8
SS1.5-30		30	S1	10	38	45	48	15	10	25	—	—	—
SS1.5-30A			S1K	10									4 x 1.8
SS1.5-30B			S1K	12									4 x 1.8
SS1.5-30C			S1K	15									5 x 2.3
SS1.5-30D			S1K	16									5 x 2.3

[Caution on Product Characteristics]

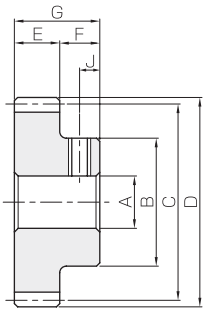
① For products with a tapped hole, a set screw is included.

② The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see page 35 for more details.

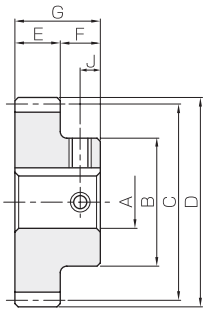
③ The backlash values shown in the table are the theoretical values for the backlash in the normal direction of a pair of identical gears in mesh.



S3T



S1T



S1K

Set Screw		Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash	Weight	Catalog No.
Size	J	Bending strength	Surface durability	Bending strength	Surface durability	(mm)	(kg)	
—	—	6.86	0.36	0.70	0.037	0.10~0.22	0.059	**SS1.5-12**
M4	4						0.063	**SS1.5-12A**
—	—	8.84	0.44	0.90	0.045	0.10~0.22	0.070	**SS1.5-13**
M4	4						0.075	**SS1.5-13A**
—	—	11.1	0.52	1.13	0.053	0.10~0.22	0.047	**SS1.5-14**
M4	5						0.051	**SS1.5-14A**
M5	5						0.046	**SS1.5-14B**
—	—	12.5	0.60	1.27	0.062	0.10~0.22	0.057	**SS1.5-15**
M4	5						0.061	**SS1.5-15A**
M5	5						0.056	**SS1.5-15B**
—	—	13.8	0.70	1.41	0.071	0.10~0.22	0.068	**SS1.5-16**
M4	5						0.072	**SS1.5-16A**
M5	5						0.067	**SS1.5-16B**
—	—	15.2	0.80	1.55	0.082	0.10~0.22	0.077	**SS1.5-17**
M5	5						0.077	**SS1.5-17A**
—	—	16.6	0.91	1.69	0.093	0.10~0.22	0.087	**SS1.5-18**
M5	5						0.086	**SS1.5-18A**
M4	5						0.080	**SS1.5-18B**
—	—	18.0	1.03	1.83	0.11	0.10~0.22	0.098	**SS1.5-19**
M5	5						0.097	**SS1.5-19A**
—	—	19.4	1.15	1.98	0.12	0.10~0.22	0.11	**SS1.5-20**
M4	5						0.11	**SS1.5-20A**
M5	5						0.11	**SS1.5-20B**
M4	5						0.10	**SS1.5-20C**
—	—	20.8	1.29	2.12	0.13	0.12~0.26	0.12	**SS1.5-21**
M5	5						0.12	**SS1.5-21A**
M4	5						0.11	**SS1.5-21B**
—	—	22.3	1.43	2.27	0.15	0.12~0.26	0.13	**SS1.5-22**
M4	5						0.12	**SS1.5-22A**
—	—	23.7	1.58	2.42	0.16	0.12~0.26	0.15	**SS1.5-23**
M4	5						0.14	**SS1.5-23A**
—	—	25.2	1.73	2.57	0.18	0.12~0.26	0.16	**SS1.5-24**
M5	5						0.16	**SS1.5-24A**
M4	5						0.15	**SS1.5-24B**
M4	5						0.14	**SS1.5-24C**
—	—	26.7	1.90	2.72	0.19	0.12~0.26	0.18	**SS1.5-25**
M5	5						0.17	**SS1.5-25A**
M4	5						0.17	**SS1.5-25B**
M4	5						0.16	**SS1.5-25C**
—	—	28.2	2.06	2.87	0.21	0.12~0.26	0.19	**SS1.5-26**
M4	5						0.18	**SS1.5-26A**
—	—	29.7	2.23	3.03	0.23	0.12~0.26	0.21	**SS1.5-27**
M4	5						0.20	**SS1.5-27A**
—	—	31.2	2.41	3.18	0.25	0.12~0.26	0.23	**SS1.5-28**
M4	5						0.22	**SS1.5-28A**
—	—	32.7	2.60	3.34	0.26	0.12~0.26	0.24	**SS1.5-29**
M4	5						0.23	**SS1.5-29A**
—	—	34.2	2.79	3.49	0.28	0.12~0.26	0.26	**SS1.5-30**
M4	5						0.26	**SS1.5-30A**
M4	5						0.25	**SS1.5-30B**
M4	5						0.24	**SS1.5-30C**
M4	5						0.23	**SS1.5-30D**

[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.

SS

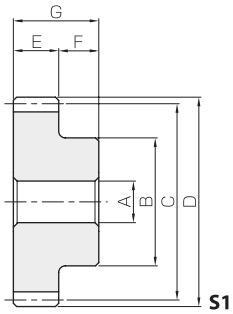
Steel Spur Gears

Module 1.5



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 J Series products is equivalent to the value shown in the table.



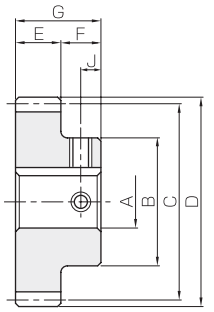
Catalog No. ● : J Series (Available-on-request)	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length	Web thickness	Web O.D.	Keyway
				A_{H7}	B	C	D	E	F	G	H	I	Width×Depth
SS1.5-32	*m*1.5	32	S1	10	40	48	51	15	10	25	—	—	—
SS1.5-32A			S1K	10	38								4 x 1.8
SS1.5-32B			S1K	12	38								4 x 1.8
SS1.5-32C			S1K	15	38								5 x 2.3
SS1.5-32D			S1K	16	38								5 x 2.3
SS1.5-34		34	S1	10	40	51	54	15	10	25	—	—	—
SS1.5-34A			S1K	12	38								4 x 1.8
SS1.5-35		35	S1	10	42	52.5	55.5	15	10	25	—	—	—
SS1.5-35A			S1K	12	40								4 x 1.8
SS1.5-36		36	S1	10	45	54	57	15	10	25	—	—	—
SS1.5-36A			S1K	12	40								4 x 1.8
SS1.5-38		38	S1	12	45	57	60	15	10	25	—	—	—
SS1.5-38A			S1K	15	40								5 x 2.3
SS1.5-40		40	S1	12	45	60	63	15	10	25	—	—	—
SS1.5-40A			S1K	12	40								4 x 1.8
SS1.5-40B			S1K	15	40								5 x 2.3
SS1.5-40C			S1K	16	40								5 x 2.3
SS1.5-42		42	S1	12	45	63	66	15	10	25	—	—	—
●**SS1.5-42 J12**			S1K	12									4 x 1.8
●**SS1.5-42 J14**			S1K	14									5 x 2.3
●**SS1.5-42 J15**			S1K	15									5 x 2.3
●**SS1.5-42 J16**			S1K	16									5 x 2.3
●**SS1.5-42 J18**			S1K	18									6 x 2.8
●**SS1.5-42 J19**			S1K	19									6 x 2.8
●**SS1.5-42 J20**			S1K	20									6 x 2.8
●**SS1.5-42 J22**			S1K	22									6 x 2.8
●**SS1.5-42 J25**			S1K	25									8 x 3.3
SS1.5-44		44	S1	12	45	66	69	15	10	25	—	—	—
●**SS1.5-44 J12**			S1K	12									4 x 1.8
●**SS1.5-44 J14**			S1K	14									5 x 2.3
●**SS1.5-44 J15**			S1K	15									5 x 2.3
●**SS1.5-44 J16**			S1K	16									5 x 2.3
●**SS1.5-44 J18**			S1K	18									6 x 2.8
●**SS1.5-44 J19**			S1K	19									6 x 2.8
●**SS1.5-44 J20**			S1K	20									6 x 2.8
●**SS1.5-44 J22**			S1K	22									6 x 2.8
●**SS1.5-44 J25**			S1K	25									8 x 3.3
SS1.5-45		45	S1	12	45	67.5	70.5	15	10	25	—	—	—
●**SS1.5-45 J12**			S1K	12									4 x 1.8
●**SS1.5-45 J14**			S1K	14									5 x 2.3
●**SS1.5-45 J15**			S1K	15									5 x 2.3
●**SS1.5-45 J16**			S1K	16									5 x 2.3
●**SS1.5-45 J18**			S1K	18									6 x 2.8
●**SS1.5-45 J19**			S1K	19									6 x 2.8
●**SS1.5-45 J20**			S1K	20									6 x 2.8
●**SS1.5-45 J22**			S1K	22									6 x 2.8
●**SS1.5-45 J25**			S1K	25									8 x 3.3

[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.

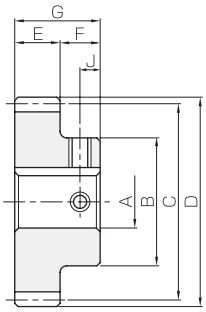
[Caution on Secondary Operations]

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.



S1K

J Series



S1K



Set Screw		Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash	Weight	Catalog No.
Size	J	Bending strength	Surface durability	Bending strength	Surface durability	(mm)	(kg)	● : J Series (Available-on-request)
—	—						0.30	**SS1.5-32**
M4	5						0.28	**SS1.5-32A**
M4	5	37.3	3.19	3.80	0.33	0.12~0.26	0.28	**SS1.5-32B**
M4	5						0.26	**SS1.5-32C**
M4	5						0.26	**SS1.5-32D**
—	—	40.4	3.63	4.12	0.37	0.12~0.26	0.32	**SS1.5-34**
M4	5						0.30	**SS1.5-34A**
—	—	41.9	3.85	4.28	0.39	0.12~0.26	0.35	**SS1.5-35**
M4	5						0.33	**SS1.5-35A**
—	—	43.5	4.09	4.43	0.42	0.12~0.26	0.38	**SS1.5-36**
M4	5						0.34	**SS1.5-36A**
—	—	46.6	4.58	4.75	0.47	0.12~0.26	0.40	**SS1.5-38**
M4	5						0.36	**SS1.5-38A**
—	—						0.44	**SS1.5-40**
M4	5	49.8	5.10	5.07	0.52	0.12~0.26	0.41	**SS1.5-40A**
M4	5						0.39	**SS1.5-40B**
M4	5						0.39	**SS1.5-40C**
—	—						0.47	**SS1.5-42**
M4*	5						0.46	●**SS1.5-42 J12**
M4*	5						0.46	●**SS1.5-42 J14**
M4*	5						0.45	●**SS1.5-42 J15**
M4*	5						0.45	●**SS1.5-42 J16**
M5	5	52.9	5.65	5.40	0.58	0.14~0.32	0.44	●**SS1.5-42 J18**
M5	5						0.43	●**SS1.5-42 J19**
M5	5						0.42	●**SS1.5-42 J20**
M5	5						0.41	●**SS1.5-42 J22**
M6	5						0.39	●**SS1.5-42 J25**
—	—						0.51	**SS1.5-44**
M4*	5						0.50	●**SS1.5-44 J12**
M4*	5						0.49	●**SS1.5-44 J14**
M4*	5						0.49	●**SS1.5-44 J15**
M4*	5						0.48	●**SS1.5-44 J16**
M5	5	56.1	6.23	5.72	0.64	0.14~0.32	0.47	●**SS1.5-44 J18**
M5	5						0.47	●**SS1.5-44 J19**
M5	5						0.46	●**SS1.5-44 J20**
M5	5						0.45	●**SS1.5-44 J22**
M6	5						0.42	●**SS1.5-44 J25**
—	—						0.52	**SS1.5-45**
M4*	5						0.52	●**SS1.5-45 J12**
M4*	5						0.51	●**SS1.5-45 J14**
M4*	5						0.51	●**SS1.5-45 J15**
M4*	5						0.50	●**SS1.5-45 J16**
M5	5	57.7	6.53	5.88	0.67	0.14~0.32	0.49	●**SS1.5-45 J18**
M5	5						0.48	●**SS1.5-45 J19**
M5	5						0.48	●**SS1.5-45 J20**
M5	5						0.47	●**SS1.5-45 J22**
M6	5						0.44	●**SS1.5-45 J25**

[Caution on J series]

① As available-on-request products, requires a lead-time for shipping within 3 working-days (excludes the day ordered), after placing an order.
Please allow additional shipping time to get to your local distributor.
② Number of products we can process for one order is 1 to 20 units. For quantities of 21 or more pieces, we need to quote price and lead time.
③ Keyways are made according to JIS B1301 standards, Js 9 tolerance.
④ Certain products which would otherwise have a very long tapped hole are conterbored to reduce the length of the tap. (Products marked with " * " are tap size).
⑤ Areas of products which have been re-worked will not be black oxide coated.
⑥ For products having a tapped hole, a set screw is included.

SS

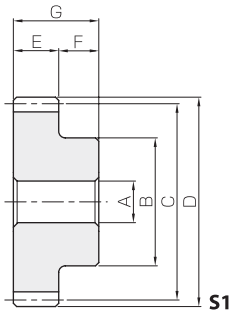
Steel Spur Gears

Module 1.5



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 J Series products is equivalent to the value shown in the table.

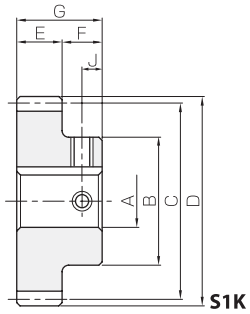


Catalog No. ● : J Series (Available-on-request)	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length	Web thickness	Web O.D.	Keyway
				A_{H7}	B	C	D	E	F	G	H	I	Width×Depth
SS1.5-46	***m*1.5**	46	S1	12	45	69	72	15	10	25	—	—	—
●**SS1.5-46 J12**			S1K	12									4 x 1.8
●**SS1.5-46 J14**			S1K	14									5 x 2.3
●**SS1.5-46 J15**			S1K	15									5 x 2.3
●**SS1.5-46 J16**			S1K	16									5 x 2.3
●**SS1.5-46 J18**			S1K	18									6 x 2.8
●**SS1.5-46 J19**			S1K	19									6 x 2.8
●**SS1.5-46 J20**			S1K	20									6 x 2.8
●**SS1.5-46 J22**			S1K	22									6 x 2.8
●**SS1.5-46 J25**			S1K	25									8 x 3.3
SS1.5-48		48	S1	12	45	72	75	15	10	25	—	—	—
●**SS1.5-48 J12**			S1K	12									4 x 1.8
●**SS1.5-48 J14**			S1K	14									5 x 2.3
●**SS1.5-48 J15**			S1K	15									5 x 2.3
●**SS1.5-48 J16**			S1K	16									5 x 2.3
●**SS1.5-48 J18**			S1K	18									6 x 2.8
●**SS1.5-48 J19**			S1K	19									6 x 2.8
●**SS1.5-48 J20**			S1K	20									6 x 2.8
●**SS1.5-48 J22**			S1K	22									6 x 2.8
●**SS1.5-48 J25**			S1K	25									8 x 3.3
SS1.5-50		50	S1	12	45	75	78	15	10	25	—	—	—
●**SS1.5-50 J12**			S1K	12									4 x 1.8
●**SS1.5-50 J14**			S1K	14									5 x 2.3
●**SS1.5-50 J15**			S1K	15									5 x 2.3
●**SS1.5-50 J16**			S1K	16									5 x 2.3
●**SS1.5-50 J18**			S1K	18									6 x 2.8
●**SS1.5-50 J19**			S1K	19									6 x 2.8
●**SS1.5-50 J20**			S1K	20									6 x 2.8
●**SS1.5-50 J22**			S1K	22									6 x 2.8
●**SS1.5-50 J25**			S1K	25									8 x 3.3
SS1.5-52		52	S1	15	50	78	81	15	10	25	—	—	—
●**SS1.5-52 J15**			S1K	15									5 x 2.3
●**SS1.5-52 J16**			S1K	16									5 x 2.3
●**SS1.5-52 J18**			S1K	18									6 x 2.8
●**SS1.5-52 J19**			S1K	19									6 x 2.8
●**SS1.5-52 J20**			S1K	20									6 x 2.8
●**SS1.5-52 J22**			S1K	22									6 x 2.8
●**SS1.5-52 J25**			S1K	25									8 x 3.3
●**SS1.5-52 J28**			S1K	28									8 x 3.3
●**SS1.5-52 J30**			S1K	30									8 x 3.3
SS1.5-54		54	S1	15	50	81	84	15	10	25	—	—	—
●**SS1.5-54 J15**			S1K	15									5 x 2.3
●**SS1.5-54 J16**			S1K	16									5 x 2.3
●**SS1.5-54 J18**			S1K	18									6 x 2.8
●**SS1.5-54 J19**			S1K	19									6 x 2.8
●**SS1.5-54 J20**			S1K	20									6 x 2.8
●**SS1.5-54 J22**			S1K	22									6 x 2.8
●**SS1.5-54 J25**			S1K	25									8 x 3.3
●**SS1.5-54 J28**			S1K	28									8 x 3.3
●**SS1.5-54 J30**			S1K	30									8 x 3.3

[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.

[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.

J Series





Set Screw		Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash	Weight	Catalog No.
Size	J	Bending strength	Surface durability	Bending strength	Surface durability	(mm)	(kg)	● : J Series (Available-on-request)
—	—	59.3	6.83	6.04	0.70	0.14~0.32	0.54	**SS1.5-46**
M4*	5						0.54	●**SS1.5-46 J12**
M4*	5						0.53	●**SS1.5-46 J14**
M4*	5						0.52	●**SS1.5-46 J15**
M4*	5						0.52	●**SS1.5-46 J16**
M5	5						0.51	●**SS1.5-46 J18**
M5	5						0.50	●**SS1.5-46 J19**
M5	5						0.50	●**SS1.5-46 J20**
M5	5						0.48	●**SS1.5-46 J22**
M6	5						0.46	●**SS1.5-46 J25**
—	—	62.4	7.47	6.37	0.76	0.14~0.32	0.58	**SS1.5-48**
M4*	5						0.58	●**SS1.5-48 J12**
M4*	5						0.57	●**SS1.5-48 J14**
M4*	5						0.56	●**SS1.5-48 J15**
M4*	5						0.56	●**SS1.5-48 J16**
M5	5						0.55	●**SS1.5-48 J18**
M5	5						0.54	●**SS1.5-48 J19**
M5	5						0.54	●**SS1.5-48 J20**
M5	5						0.52	●**SS1.5-48 J22**
M6	5						0.50	●**SS1.5-48 J25**
—	—	65.7	8.15	6.69	0.83	0.14~0.32	0.62	**SS1.5-50**
M4*	5						0.62	●**SS1.5-50 J12**
M4*	5						0.61	●**SS1.5-50 J14**
M4*	5						0.60	●**SS1.5-50 J15**
M4*	5						0.60	●**SS1.5-50 J16**
M5	5						0.59	●**SS1.5-50 J18**
M5	5						0.58	●**SS1.5-50 J19**
M5	5						0.58	●**SS1.5-50 J20**
M5	5						0.56	●**SS1.5-50 J22**
M6	5						0.54	●**SS1.5-50 J25**
—	—	68.9	8.85	7.02	0.90	0.14~0.32	0.68	**SS1.5-52**
M4*	5						0.67	●**SS1.5-52 J15**
M4*	5						0.67	●**SS1.5-52 J16**
M5	5						0.66	●**SS1.5-52 J18**
M5	5						0.65	●**SS1.5-52 J19**
M5	5						0.65	●**SS1.5-52 J20**
M5	5						0.64	●**SS1.5-52 J22**
M6	5						0.61	●**SS1.5-52 J25**
M6	5						0.59	●**SS1.5-52 J28**
M6	5						0.57	●**SS1.5-52 J30**
—	—	72.1	9.59	7.35	0.98	0.14~0.32	0.73	**SS1.5-54**
M4*	5						0.72	●**SS1.5-54 J15**
M4*	5						0.71	●**SS1.5-54 J16**
M5	5						0.70	●**SS1.5-54 J18**
M5	5						0.70	●**SS1.5-54 J19**
M5	5						0.69	●**SS1.5-54 J20**
M5	5						0.68	●**SS1.5-54 J22**
M6	5						0.66	●**SS1.5-54 J25**
M6	5						0.63	●**SS1.5-54 J28**
M6	5						0.61	●**SS1.5-54 J30**

[Caution on J series]

① As available-on-request products, requires a lead-time for shipping within 3 working-days (excludes the day ordered), after placing an order.
Please allow additional shipping time to get to your local distributor.

② Number of products we can process for one order is 1 to 20 units. For quantities of 21 or more pieces, we need to quote price and lead time.

③ Keyways are made according to JIS B1301 standards, Js 9 tolerance.

④ Certain products which would otherwise have a very long tapped hole are conterbored to reduce the length of the tap. (Products marked with " * " are tap size).

⑤ Areas of products which have been re-worked will not be black oxide coated.

⑥ For products having a tapped hole, a set screw is included.

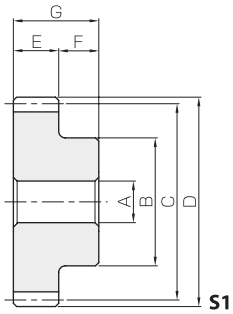
SS
Steel Spur Gears

Module 1.5



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 J Series products is equivalent to the value shown in the table.

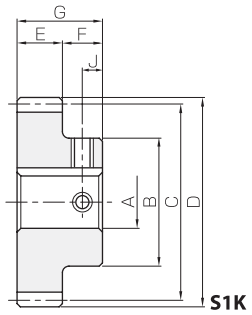


Catalog No. ● : J Series (Available-on-request)	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length	Web thickness	Web O.D.	Keyway
				A_{H7}	B	C	D	E	F	G	H	I	Width×Depth
SS1.5-55	*m*1.5	55	S1	15	50	82.5	85.5	15	10	25	—	—	—
●SS1.5-55 J15			S1K	15									5 x 2.3
●SS1.5-55 J16			S1K	16									5 x 2.3
●SS1.5-55 J18			S1K	18									6 x 2.8
●SS1.5-55 J19			S1K	19									6 x 2.8
●SS1.5-55 J20			S1K	20									6 x 2.8
●SS1.5-55 J22			S1K	22									6 x 2.8
●SS1.5-55 J25			S1K	25									8 x 3.3
●SS1.5-55 J28			S1K	28									8 x 3.3
●SS1.5-55 J30			S1K	30									8 x 3.3
SS1.5-56		56	S1	15	50	84	87	15	10	25	—	—	—
●SS1.5-56 J15			S1K	15									5 x 2.3
●SS1.5-56 J16			S1K	16									5 x 2.3
●SS1.5-56 J18			S1K	18									6 x 2.8
●SS1.5-56 J19			S1K	19									6 x 2.8
●SS1.5-56 J20			S1K	20									6 x 2.8
●SS1.5-56 J22			S1K	22									6 x 2.8
●SS1.5-56 J25			S1K	25									8 x 3.3
●SS1.5-56 J28			S1K	28									8 x 3.3
●SS1.5-56 J30			S1K	30									8 x 3.3
SS1.5-58		58	S1	15	50	87	90	15	10	25	—	—	—
●SS1.5-58 J15			S1K	15									5 x 2.3
●SS1.5-58 J16			S1K	16									5 x 2.3
●SS1.5-58 J18			S1K	18									6 x 2.8
●SS1.5-58 J19			S1K	19									6 x 2.8
●SS1.5-58 J20			S1K	20									6 x 2.8
●SS1.5-58 J22			S1K	22									6 x 2.8
●SS1.5-58 J25			S1K	25									8 x 3.3
●SS1.5-58 J28			S1K	28									8 x 3.3
●SS1.5-58 J30			S1K	30									8 x 3.3
SS1.5-60		60	S1	15	50	90	93	15	10	25	—	—	—
●SS1.5-60 J15			S1K	15									5 x 2.3
●SS1.5-60 J16			S1K	16									5 x 2.3
●SS1.5-60 J18			S1K	18									6 x 2.8
●SS1.5-60 J19			S1K	19									6 x 2.8
●SS1.5-60 J20			S1K	20									6 x 2.8
●SS1.5-60 J22			S1K	22									6 x 2.8
●SS1.5-60 J25			S1K	25									8 x 3.3
●SS1.5-60 J28			S1K	28									8 x 3.3
●SS1.5-60 J30			S1K	30									8 x 3.3
SS1.5-62		62	S1	15	55	93	96	15	10	25	—	—	—
●SS1.5-62 J15			S1K	15									5 x 2.3
●SS1.5-62 J16			S1K	16									5 x 2.3
●SS1.5-62 J18			S1K	18									6 x 2.8
●SS1.5-62 J19			S1K	19									6 x 2.8
●SS1.5-62 J20			S1K	20									6 x 2.8
●SS1.5-62 J22			S1K	22									6 x 2.8
●SS1.5-62 J25			S1K	25									8 x 3.3
●SS1.5-62 J28			S1K	28									8 x 3.3
●SS1.5-62 J30			S1K	30									8 x 3.3
●SS1.5-62 J32			S1K	32									10 x 3.3

[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.

[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.

J Series





Set Screw		Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash	Weight	Catalog No.
Size	J	Bending strength	Surface durability	Bending strength	Surface durability	(mm)	(kg)	● : J Series (Available-on-request)
—	—	73.7	9.96	7.51	1.02	0.14~0.32	0.75	**SS1.5-55**
M4*	5						0.74	●**SS1.5-55 J15**
M4*	5						0.74	●**SS1.5-55 J16**
M5	5						0.73	●**SS1.5-55 J18**
M5	5						0.72	●**SS1.5-55 J19**
M5	5						0.72	●**SS1.5-55 J20**
M5	5						0.70	●**SS1.5-55 J22**
M6	5						0.68	●**SS1.5-55 J25**
M6	5						0.65	●**SS1.5-55 J28**
M6	5						0.64	●**SS1.5-55 J30**
—	—	75.3	10.4	7.68	1.06	0.14~0.32	0.77	**SS1.5-56**
M4*	5						0.76	●**SS1.5-56 J15**
M4*	5						0.76	●**SS1.5-56 J16**
M5	5						0.75	●**SS1.5-56 J18**
M5	5						0.74	●**SS1.5-56 J19**
M5	5						0.74	●**SS1.5-56 J20**
M5	5						0.73	●**SS1.5-56 J22**
M6	5						0.70	●**SS1.5-56 J25**
M6	5						0.68	●**SS1.5-56 J28**
M6	5						0.66	●**SS1.5-56 J30**
—	—	78.5	11.2	8.01	1.14	0.14~0.32	0.82	**SS1.5-58**
M4*	5						0.81	●**SS1.5-58 J15**
M4*	5						0.81	●**SS1.5-58 J16**
M5	5						0.80	●**SS1.5-58 J18**
M5	5						0.79	●**SS1.5-58 J19**
M5	5						0.79	●**SS1.5-58 J20**
M5	5						0.77	●**SS1.5-58 J22**
M6	5						0.75	●**SS1.5-58 J25**
M6	5						0.73	●**SS1.5-58 J28**
M6	5						0.71	●**SS1.5-58 J30**
—	—	81.8	12.0	8.34	1.22	0.14~0.32	0.87	**SS1.5-60**
M4*	5						0.86	●**SS1.5-60 J15**
M4*	5						0.86	●**SS1.5-60 J16**
M5	5						0.85	●**SS1.5-60 J18**
M5	5						0.84	●**SS1.5-60 J19**
M5	5						0.84	●**SS1.5-60 J20**
M5	5						0.82	●**SS1.5-60 J22**
M6	5						0.80	●**SS1.5-60 J25**
M6	5						0.77	●**SS1.5-60 J28**
M6	5						0.76	●**SS1.5-60 J30**
—	—	85.0	12.8	8.67	1.31	0.14~0.32	0.95	**SS1.5-62**
M4*	5						0.94	●**SS1.5-62 J15**
M4*	5						0.94	●**SS1.5-62 J16**
M5*	5						0.93	●**SS1.5-62 J18**
M5*	5						0.92	●**SS1.5-62 J19**
M5*	5						0.92	●**SS1.5-62 J20**
M5	5						0.90	●**SS1.5-62 J22**
M6	5						0.88	●**SS1.5-62 J25**
M6	5						0.86	●**SS1.5-62 J28**
M6	5						0.84	●**SS1.5-62 J30**
M8	5						0.82	●**SS1.5-62 J32**

[Caution on J series]

① As available-on-request products, requires a lead-time for shipping within 3 working-days (excludes the day ordered), after placing an order.
Please allow additional shipping time to get to your local distributor.
② Number of products we can process for one order is 1 to 20 units. For quantities of 21 or more pieces, we need to quote price and lead time.
③ Keyways are made according to JIS B1301 standards, Js 9 tolerance.
④ Certain products which would otherwise have a very long tapped hole are conterbored to reduce the length of the tap. (Products marked with " * " are tap size).
⑤ Areas of products which have been re-worked will not be black oxide coated.
⑥ For products having a tapped hole, a set screw is included.

SS

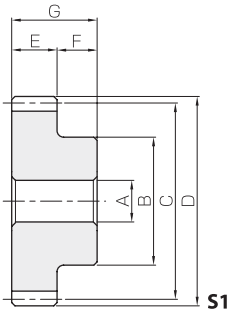
Steel Spur Gears

Module 1.5



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 J Series products is equivalent to the value shown in the table.

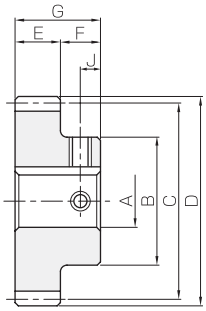


Catalog No. ● : J Series (Available-on-request)	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length	Web thickness	Web O.D.	Keyway
				A_{H7}	B	C	D	E	F	G	H	I	Width×Depth
SS1.5-64			S1	15									—
●SS1.5-64 J15			S1K	15									5 x 2.3
●SS1.5-64 J16			S1K	16									5 x 2.3
●SS1.5-64 J18			S1K	18									6 x 2.8
●SS1.5-64 J19			S1K	19									6 x 2.8
●SS1.5-64 J20		64	S1K	20	55	96	99	15	10	25	—	—	6 x 2.8
●SS1.5-64 J22			S1K	22									6 x 2.8
●SS1.5-64 J25			S1K	25									8 x 3.3
●SS1.5-64 J28			S1K	28									8 x 3.3
●SS1.5-64 J30			S1K	30									8 x 3.3
●SS1.5-64 J32			S1K	32									10 x 3.3
SS1.5-65			S1	15									—
●SS1.5-65 J15			S1K	15									5 x 2.3
●SS1.5-65 J16			S1K	16									5 x 2.3
●SS1.5-65 J18			S1K	18									6 x 2.8
●SS1.5-65 J19			S1K	19									6 x 2.8
●SS1.5-65 J20		65	S1K	20	55	97.5	100.5	15	10	25	—	—	6 x 2.8
●SS1.5-65 J22			S1K	22									6 x 2.8
●SS1.5-65 J25			S1K	25									8 x 3.3
●SS1.5-65 J28			S1K	28									8 x 3.3
●SS1.5-65 J30			S1K	30									8 x 3.3
●SS1.5-65 J32			S1K	32									10 x 3.3
SS1.5-66			S1	15									—
●SS1.5-66 J15			S1K	15									5 x 2.3
●SS1.5-66 J16			S1K	16									5 x 2.3
●SS1.5-66 J18			S1K	18									6 x 2.8
●SS1.5-66 J19			S1K	19									6 x 2.8
●SS1.5-66 J20	***m*1.5**	66	S1K	20	55	99	102	15	10	25	—	—	6 x 2.8
●SS1.5-66 J22			S1K	22									6 x 2.8
●SS1.5-66 J25			S1K	25									8 x 3.3
●SS1.5-66 J28			S1K	28									8 x 3.3
●SS1.5-66 J30			S1K	30									8 x 3.3
●SS1.5-66 J32			S1K	32									10 x 3.3
SS1.5-68			S1	15									—
●SS1.5-68 J15			S1K	15									5 x 2.3
●SS1.5-68 J16			S1K	16									5 x 2.3
●SS1.5-68 J18			S1K	18									6 x 2.8
●SS1.5-68 J19			S1K	19									6 x 2.8
●SS1.5-68 J20		68	S1K	20	55	102	105	15	10	25	—	—	6 x 2.8
●SS1.5-68 J22			S1K	22									6 x 2.8
●SS1.5-68 J25			S1K	25									8 x 3.3
●SS1.5-68 J28			S1K	28									8 x 3.3
●SS1.5-68 J30			S1K	30									8 x 3.3
●SS1.5-68 J32			S1K	32									10 x 3.3
SS1.5-70			S1	15									—
●SS1.5-70 J15			S1K	15									5 x 2.3
●SS1.5-70 J16			S1K	16									5 x 2.3
●SS1.5-70 J18			S1K	18									6 x 2.8
●SS1.5-70 J19			S1K	19									6 x 2.8
●SS1.5-70 J20		70	S1K	20	55	105	108	15	10	25	—	—	6 x 2.8
●SS1.5-70 J22			S1K	22									6 x 2.8
●SS1.5-70 J25			S1K	25									8 x 3.3
●SS1.5-70 J28			S1K	28									8 x 3.3
●SS1.5-70 J30			S1K	30									8 x 3.3
●SS1.5-70 J32			S1K	32									10 x 3.3

[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.

[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.

J Series





Set Screw		Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash	Weight	Catalog No.
Size	J	Bending strength	Surface durability	Bending strength	Surface durability	(mm)	(kg)	● : J Series (Available-on-request)
—	—						1.00	**SS1.5-64**
M4*	5						0.99	●**SS1.5-64 J15**
M4*	5						0.99	●**SS1.5-64 J16**
M5*	5						0.98	●**SS1.5-64 J18**
M5*	5						0.97	●**SS1.5-64 J19**
M5*	5	88.3	13.7	9.00	1.40	0.14~0.32	0.97	●**SS1.5-64 J20**
M5	5						0.96	●**SS1.5-64 J22**
M6	5						0.93	●**SS1.5-64 J25**
M6	5						0.91	●**SS1.5-64 J28**
M6	5						0.89	●**SS1.5-64 J30**
M8	5						0.87	●**SS1.5-64 J32**
—	—						1.03	**SS1.5-65**
M4*	5						1.02	●**SS1.5-65 J15**
M4*	5						1.02	●**SS1.5-65 J16**
M5*	5						1.01	●**SS1.5-65 J18**
M5*	5						1.00	●**SS1.5-65 J19**
M5*	5	89.9	14.2	9.17	1.45	0.14~0.32	1.00	●**SS1.5-65 J20**
M5	5						0.98	●**SS1.5-65 J22**
M6	5						0.96	●**SS1.5-65 J25**
M6	5						0.94	●**SS1.5-65 J28**
M6	5						0.92	●**SS1.5-65 J30**
M8	5						0.90	●**SS1.5-65 J32**
—	—						1.06	**SS1.5-66**
M4*	5						1.05	●**SS1.5-66 J15**
M4*	5						1.04	●**SS1.5-66 J16**
M5*	5						1.03	●**SS1.5-66 J18**
M5*	5						1.03	●**SS1.5-66 J19**
M5*	5	91.5	14.6	9.33	1.49	0.14~0.32	1.02	●**SS1.5-66 J20**
M5	5						1.01	●**SS1.5-66 J22**
M6	5						0.99	●**SS1.5-66 J25**
M6	5						0.96	●**SS1.5-66 J28**
M6	5						0.95	●**SS1.5-66 J30**
M8	5						0.92	●**SS1.5-66 J32**
—	—						1.11	**SS1.5-68**
M4*	5						1.10	●**SS1.5-68 J15**
M4*	5						1.10	●**SS1.5-68 J16**
M5*	5						1.09	●**SS1.5-68 J18**
M5*	5						1.08	●**SS1.5-68 J19**
M5*	5	94.8	15.6	9.66	1.59	0.14~0.32	1.08	●**SS1.5-68 J20**
M5	5						1.07	●**SS1.5-68 J22**
M6	5						1.04	●**SS1.5-68 J25**
M6	5						1.02	●**SS1.5-68 J28**
M6	5						1.00	●**SS1.5-68 J30**
M8	5						0.98	●**SS1.5-68 J32**
—	—						1.17	**SS1.5-70**
M4*	5						1.16	●**SS1.5-70 J15**
M4*	5						1.16	●**SS1.5-70 J16**
M5*	5						1.15	●**SS1.5-70 J18**
M5*	5						1.14	●**SS1.5-70 J19**
M5*	5	98.0	16.6	10.0	1.69	0.14~0.32	1.14	●**SS1.5-70 J20**
M5	5						1.12	●**SS1.5-70 J22**
M6	5						1.10	●**SS1.5-70 J25**
M6	5						1.08	●**SS1.5-70 J28**
M6	5						1.06	●**SS1.5-70 J30**
M8	5						1.04	●**SS1.5-70 J32**

[Caution on J series]
① As available-on-request products, requires a lead-time for shipping within 3 working-days (excludes the day ordered), after placing an order.
Please allow additional shipping time to get to your local distributor.
② Number of products we can process for one order is 1 to 20 units. For quantities of 21 or more pieces, we need to quote price and lead time.
③ Keyways are made according to JIS B1301 standards, Js 9 tolerance.
④ Certain products which would otherwise have a very long tapped hole are conterbored to reduce the length of the tap. (Products marked with " * " are tap size).
⑤ Areas of products which have been re-worked will not be black oxide coated.
⑥ For products having a tapped hole, a set screw is included.

SS

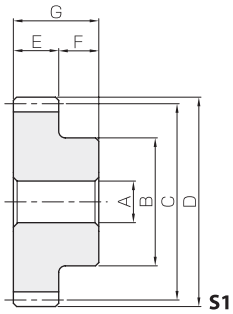
Steel Spur Gears

Module 1.5



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 J Series products is equivalent to the value shown in the table.

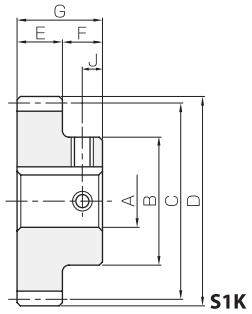


Catalog No. ● : J Series (Available-on-request)	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length	Web thickness	Web O.D.	Keyway
				A_{H7}	B	C	D	E	F	G	H	I	Width×Depth
SS1.5-72	*m*1.5	72	S1	15	55	108	111	15	10	25	—	—	—
●SS1.5-72 J15			S1K	15									5 x 2.3
●SS1.5-72 J16			S1K	16									5 x 2.3
●SS1.5-72 J18			S1K	18									6 x 2.8
●SS1.5-72 J19			S1K	19									6 x 2.8
●SS1.5-72 J20			S1K	20									6 x 2.8
●SS1.5-72 J22			S1K	22									6 x 2.8
●SS1.5-72 J25			S1K	25									8 x 3.3
●SS1.5-72 J28			S1K	28									8 x 3.3
●SS1.5-72 J30			S1K	30									8 x 3.3
●SS1.5-72 J32			S1K	32									10 x 3.3
SS1.5-75		75	S1	15	60	112.5	115.5	15	10	25	—	—	—
●SS1.5-75 J15			S1K	15									5 x 2.3
●SS1.5-75 J16			S1K	16									5 x 2.3
●SS1.5-75 J18			S1K	18									6 x 2.8
●SS1.5-75 J19			S1K	19									6 x 2.8
●SS1.5-75 J20			S1K	20									6 x 2.8
●SS1.5-75 J22			S1K	22									6 x 2.8
●SS1.5-75 J25			S1K	25									8 x 3.3
●SS1.5-75 J28			S1K	28									8 x 3.3
●SS1.5-75 J30			S1K	30									8 x 3.3
●SS1.5-75 J32			S1K	32									10 x 3.3
●SS1.5-75 J35			S1K	35									10 x 3.3
SS1.5-76		76	S1	15	60	114	117	15	10	25	—	—	—
●SS1.5-76 J15			S1K	15									5 x 2.3
●SS1.5-76 J16			S1K	16									5 x 2.3
●SS1.5-76 J18			S1K	18									6 x 2.8
●SS1.5-76 J19			S1K	19									6 x 2.8
●SS1.5-76 J20			S1K	20									6 x 2.8
●SS1.5-76 J22			S1K	22									6 x 2.8
●SS1.5-76 J25			S1K	25									8 x 3.3
●SS1.5-76 J28			S1K	28									8 x 3.3
●SS1.5-76 J30			S1K	30									8 x 3.3
●SS1.5-76 J32			S1K	32									10 x 3.3
●SS1.5-76 J35			S1K	35									10 x 3.3
SS1.5-80		80	S1	15	60	120	123	15	10	25	—	—	—
●SS1.5-80 J15			S1K	15									5 x 2.3
●SS1.5-80 J16			S1K	16									5 x 2.3
●SS1.5-80 J18			S1K	18									6 x 2.8
●SS1.5-80 J19			S1K	19									6 x 2.8
●SS1.5-80 J20			S1K	20									6 x 2.8
●SS1.5-80 J22			S1K	22									6 x 2.8
●SS1.5-80 J25			S1K	25									8 x 3.3
●SS1.5-80 J28			S1K	28									8 x 3.3
●SS1.5-80 J30			S1K	30									8 x 3.3
●SS1.5-80 J32			S1K	32									10 x 3.3
●SS1.5-80 J35			S1K	35									10 x 3.3

[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.

[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.

J Series





Set Screw		Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash	Weight	Catalog No.
Size	J	Bending strength	Surface durability	Bending strength	Surface durability	(mm)	(kg)	● : J Series (Available-on-request)
—	—	101	17.6	10.3	1.79	0.14~0.32	1.23	**SS1.5-72**
M4*	5						1.22	**●SS1.5-72 J15**
M4*	5						1.22	**●SS1.5-72 J16**
M5*	5						1.21	**●SS1.5-72 J18**
M5*	5						1.20	**●SS1.5-72 J19**
M5*	5						1.20	**●SS1.5-72 J20**
M5	5						1.18	**●SS1.5-72 J22**
M6	5						1.16	**●SS1.5-72 J25**
M6	5						1.14	**●SS1.5-72 J28**
M6	5						1.12	**●SS1.5-72 J30**
M8	5						1.10	**●SS1.5-72 J32**
—	—	106	19.2	10.8	1.95	0.14~0.32	1.36	**SS1.5-75**
M4*	5						1.35	**●SS1.5-75 J15**
M4*	5						1.34	**●SS1.5-75 J16**
M5*	5						1.33	**●SS1.5-75 J18**
M5*	5						1.33	**●SS1.5-75 J19**
M5*	5						1.32	**●SS1.5-75 J20**
M5*	5						1.31	**●SS1.5-75 J22**
M6	5						1.29	**●SS1.5-75 J25**
M6	5						1.26	**●SS1.5-75 J28**
M6	5						1.24	**●SS1.5-75 J30**
M8	5						1.22	**●SS1.5-75 J32**
M8	5						1.19	**●SS1.5-75 J35**
—	—	108	19.7	11.0	2.01	0.14~0.32	1.39	**SS1.5-76**
M4*	5						1.38	**●SS1.5-76 J15**
M4*	5						1.37	**●SS1.5-76 J16**
M5*	5						1.36	**●SS1.5-76 J18**
M5*	5						1.36	**●SS1.5-76 J19**
M5*	5						1.35	**●SS1.5-76 J20**
M5*	5						1.34	**●SS1.5-76 J22**
M6	5						1.32	**●SS1.5-76 J25**
M6	5						1.29	**●SS1.5-76 J28**
M6	5						1.28	**●SS1.5-76 J30**
M8	5						1.25	**●SS1.5-76 J32**
M8	5						1.22	**●SS1.5-76 J35**
—	—	114	22.0	11.7	2.24	0.14~0.32	1.52	**SS1.5-80**
M4*	5						1.51	**●SS1.5-80 J15**
M4*	5						1.50	**●SS1.5-80 J16**
M5*	5						1.49	**●SS1.5-80 J18**
M5*	5						1.49	**●SS1.5-80 J19**
M5*	5						1.48	**●SS1.5-80 J20**
M5*	5						1.47	**●SS1.5-80 J22**
M6	5						1.45	**●SS1.5-80 J25**
M6	5						1.42	**●SS1.5-80 J28**
M6	5						1.41	**●SS1.5-80 J30**
M8	5						1.38	**●SS1.5-80 J32**
M8	5						1.35	**●SS1.5-80 J35**

[Caution on J series]

① As available-on-request products, requires a lead-time for shipping within 3 working-days (excludes the day ordered), after placing an order.
Please allow additional shipping time to get to your local distributor.
② Number of products we can process for one order is 1 to 20 units. For quantities of 21 or more pieces, we need to quote price and lead time.
③ Keyways are made according to JIS B1301 standards, Js 9 tolerance.
④ Certain products which would otherwise have a very long tapped hole are conterbored to reduce the length of the tap. (Products marked with " * " are tap size).
⑤ Areas of products which have been re-worked will not be black oxide coated.
⑥ For products having a tapped hole, a set screw is included.

SS

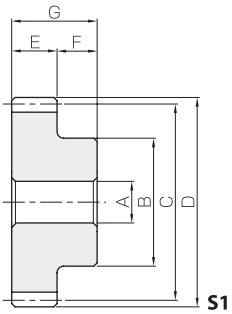
Steel Spur Gears

Module 1.5



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 J Series products is equivalent to the value shown in the table.

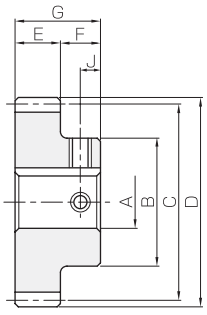


Catalog No. ● : J Series (Available-on-request)	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length	Web thickness	Web O.D.	Keyway
				A_{H7}	B	C	D	E	F	G	H	I	Width×Depth
SS1.5-84	*m*1.5	84	S1	15	60	126	129	15	10	25	—	—	—
●SS1.5-84 J15			S1K	15									5 x 2.3
●SS1.5-84 J16			S1K	16									5 x 2.3
●SS1.5-84 J18			S1K	18									6 x 2.8
●SS1.5-84 J19			S1K	19									6 x 2.8
●SS1.5-84 J20			S1K	20									6 x 2.8
●SS1.5-84 J22			S1K	22									6 x 2.8
●SS1.5-84 J25			S1K	25									8 x 3.3
●SS1.5-84 J28			S1K	28									8 x 3.3
●SS1.5-84 J30			S1K	30									8 x 3.3
●SS1.5-84 J32			S1K	32									10 x 3.3
●SS1.5-84 J35			S1K	35									10 x 3.3
SS1.5-85		85	S1	15	60	127.5	130.5	15	10	25	—	—	—
●SS1.5-85 J15			S1K	15									5 x 2.3
●SS1.5-85 J16			S1K	16									5 x 2.3
●SS1.5-85 J18			S1K	18									6 x 2.8
●SS1.5-85 J19			S1K	19									6 x 2.8
●SS1.5-85 J20			S1K	20									6 x 2.8
●SS1.5-85 J22			S1K	22									6 x 2.8
●SS1.5-85 J25			S1K	25									8 x 3.3
●SS1.5-85 J28			S1K	28									8 x 3.3
●SS1.5-85 J30			S1K	30									8 x 3.3
●SS1.5-85 J32			S1K	32									10 x 3.3
●SS1.5-85 J35			S1K	35									10 x 3.3
SS1.5-88		88	S1	15	60	132	135	15	10	25	—	—	—
●SS1.5-88 J15			S1K	15									5 x 2.3
●SS1.5-88 J16			S1K	16									5 x 2.3
●SS1.5-88 J18			S1K	18									6 x 2.8
●SS1.5-88 J19			S1K	19									6 x 2.8
●SS1.5-88 J20			S1K	20									6 x 2.8
●SS1.5-88 J22			S1K	22									6 x 2.8
●SS1.5-88 J25			S1K	25									8 x 3.3
●SS1.5-88 J28			S1K	28									8 x 3.3
●SS1.5-88 J30			S1K	30									8 x 3.3
●SS1.5-88 J32			S1K	32									10 x 3.3
●SS1.5-88 J35			S1K	35									10 x 3.3
SS1.5-90		90	S1	15	60	135	138	15	10	25	—	—	—
●SS1.5-90 J15			S1K	15									5 x 2.3
●SS1.5-90 J16			S1K	16									5 x 2.3
●SS1.5-90 J18			S1K	18									6 x 2.8
●SS1.5-90 J19			S1K	19									6 x 2.8
●SS1.5-90 J20			S1K	20									6 x 2.8
●SS1.5-90 J22			S1K	22									6 x 2.8
●SS1.5-90 J25			S1K	25									8 x 3.3
●SS1.5-90 J28			S1K	28									8 x 3.3
●SS1.5-90 J30			S1K	30									8 x 3.3
●SS1.5-90 J32			S1K	32									10 x 3.3
●SS1.5-90 J35			S1K	35									10 x 3.3

[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.

[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.

J Series





Set Screw		Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash	Weight	Catalog No.
Size	J	Bending strength	Surface durability	Bending strength	Surface durability	(mm)	(kg)	● : J Series (Available-on-request)
—	—	121	24.4	12.3	2.49	0.18~0.38	1.66	**SS1.5-84**
M4*	5						1.64	●**SS1.5-84 J15**
M4*	5						1.64	●**SS1.5-84 J16**
M5*	5						1.63	●**SS1.5-84 J18**
M5*	5						1.62	●**SS1.5-84 J19**
M5*	5						1.62	●**SS1.5-84 J20**
M5*	5						1.61	●**SS1.5-84 J22**
M6	5						1.58	●**SS1.5-84 J25**
M6	5						1.56	●**SS1.5-84 J28**
M6	5						1.54	●**SS1.5-84 J30**
M8	5						1.52	●**SS1.5-84 J32**
M8	5						1.49	●**SS1.5-84 J35**
—	—	123	25.1	12.5	2.56	0.18~0.38	1.69	**SS1.5-85**
M4*	5						1.68	●**SS1.5-85 J15**
M4*	5						1.68	●**SS1.5-85 J16**
M5*	5						1.66	●**SS1.5-85 J18**
M5*	5						1.66	●**SS1.5-85 J19**
M5*	5						1.65	●**SS1.5-85 J20**
M5*	5						1.64	●**SS1.5-85 J22**
M6	5						1.62	●**SS1.5-85 J25**
M6	5						1.59	●**SS1.5-85 J28**
M6	5						1.58	●**SS1.5-85 J30**
M8	5						1.55	●**SS1.5-85 J32**
M8	5						1.52	●**SS1.5-85 J35**
—	—	128	27.0	13.0	2.75	0.18~0.38	1.80	**SS1.5-88**
M4*	5						1.79	●**SS1.5-88 J15**
M4*	5						1.78	●**SS1.5-88 J16**
M5*	5						1.77	●**SS1.5-88 J18**
M5*	5						1.77	●**SS1.5-88 J19**
M5*	5						1.76	●**SS1.5-88 J20**
M5*	5						1.75	●**SS1.5-88 J22**
M6	5						1.73	●**SS1.5-88 J25**
M6	5						1.70	●**SS1.5-88 J28**
M6	5						1.69	●**SS1.5-88 J30**
M8	5						1.66	●**SS1.5-88 J32**
M8	5						1.63	●**SS1.5-88 J35**
—	—	131	28.3	13.3	2.89	0.18~0.38	1.87	**SS1.5-90**
M4*	5						1.86	●**SS1.5-90 J15**
M4*	5						1.86	●**SS1.5-90 J16**
M5*	5						1.85	●**SS1.5-90 J18**
M5*	5						1.84	●**SS1.5-90 J19**
M5*	5						1.84	●**SS1.5-90 J20**
M5*	5						1.82	●**SS1.5-90 J22**
M6	5						1.80	●**SS1.5-90 J25**
M6	5						1.78	●**SS1.5-90 J28**
M6	5						1.76	●**SS1.5-90 J30**
M8	5						1.74	●**SS1.5-90 J32**
M8	5						1.71	●**SS1.5-90 J35**

[Caution on J series]

① As available-on-request products, requires a lead-time for shipping within 3 working-days (excludes the day ordered), after placing an order.
Please allow additional shipping time to get to your local distributor.
② Number of products we can process for one order is 1 to 20 units. For quantities of 21 or more pieces, we need to quote price and lead time.
③ Keyways are made according to JIS B1301 standards, Js 9 tolerance.
④ Certain products which would otherwise have a very long tapped hole are conterbored to reduce the length of the tap. (Products marked with " * " are tap size).
⑤ Areas of products which have been re-worked will not be black oxide coated.
⑥ For products having a tapped hole, a set screw is included.

SS

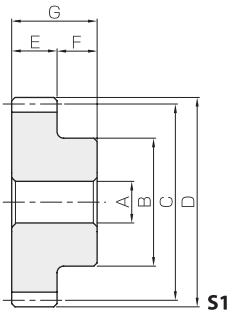
Steel Spur Gears

Module 1.5



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 J Series products is equivalent to the value shown in the table.

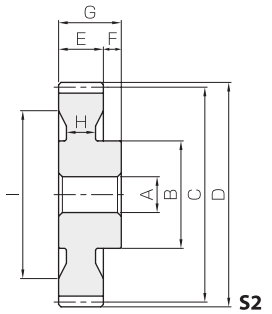


Catalog No. ● : J Series (Available-on-request)	Module	No. of teeth	Shape	Bore	Hub dia.	Pitch dia.	Outside dia.	Face width	Hub width	Total length	Web thickness	Web O.D.	Keyway
				A_{H7}	B	C	D	E	F	G	H	I	Width×Depth
SS1.5-95	***m*1.5**	95	S1	15	60	142.5	145.5	15	10	25	—	—	—
●SS1.5-95 J15			S1K	15									5 x 2.3
●SS1.5-95 J16			S1K	16									5 x 2.3
●SS1.5-95 J18			S1K	18									6 x 2.8
●SS1.5-95 J19			S1K	19									6 x 2.8
●SS1.5-95 J20			S1K	20									6 x 2.8
●SS1.5-95 J22			S1K	22									6 x 2.8
●SS1.5-95 J25			S1K	25									8 x 3.3
●SS1.5-95 J28			S1K	28									8 x 3.3
●SS1.5-95 J30			S1K	30									8 x 3.3
●SS1.5-95 J32			S1K	32									10 x 3.3
●SS1.5-95 J35			S1K	35									10 x 3.3
SS1.5-100		100	S2	15	60	150	153	15	10	25	9	125	—
●SS1.5-100 J15			S2K	15									5 x 2.3
●SS1.5-100 J16			S2K	16									5 x 2.3
●SS1.5-100 J18			S2K	18									6 x 2.8
●SS1.5-100 J19			S2K	19									6 x 2.8
●SS1.5-100 J20			S2K	20									6 x 2.8
●SS1.5-100 J22			S2K	22									6 x 2.8
●SS1.5-100 J25			S2K	25									8 x 3.3
●SS1.5-100 J28			S2K	28									8 x 3.3
●SS1.5-100 J30			S2K	30									8 x 3.3
●SS1.5-100 J32			S2K	32									10 x 3.3
●SS1.5-100 J35			S2K	35									10 x 3.3
SS1.5-120		120	S2	15	70	180	183	15	10	25	10	153	—
●SS1.5-120 J15			S2K	15									5 x 2.3
●SS1.5-120 J16			S2K	16									5 x 2.3
●SS1.5-120 J18			S2K	18									6 x 2.8
●SS1.5-120 J19			S2K	19									6 x 2.8
●SS1.5-120 J20			S2K	20									6 x 2.8
●SS1.5-120 J22			S2K	22									6 x 2.8
●SS1.5-120 J25			S2K	25									8 x 3.3
●SS1.5-120 J28			S2K	28									8 x 3.3
●SS1.5-120 J30			S2K	30									8 x 3.3
●SS1.5-120 J32			S2K	32									10 x 3.3
●SS1.5-120 J35			S2K	35									10 x 3.3
SS1.5-150		150	S1	20	180	225	228	15	10	25	—	—	—
SS1.5-200		200	S1	25	240	300	303	15	10	25	—	—	—

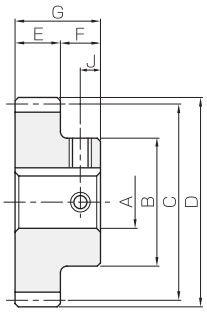
[Caution on Product Characteristics]
① The allowable torques shown in the table are calculated values according to the assumed usage conditions. Please see page 35 for more details.
② The backlash values shown in the table are the theoretical values for the backlash in the normal direction of a pair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

[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.

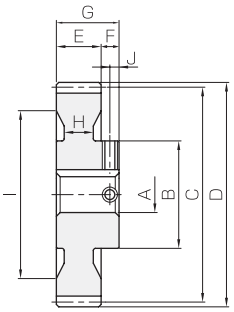
J Series



S2



S1K



S2K



Set Screw		Allowable torque (N·m)		Allowable torque (kgf·m)		Backlash	Weight	Catalog No.
Size	J	Bending strength	Surface durability	Bending strength	Surface durability	(mm)	(kg)	● : J Series (Available-on-request)
—	—	139	31.8	14.2	3.24	0.18~0.38	2.07	**SS1.5-95**
M4*	5						2.05	●**SS1.5-95 J15**
M4*	5						2.05	●**SS1.5-95 J16**
M5*	5						2.04	●**SS1.5-95 J18**
M5*	5						2.03	●**SS1.5-95 J19**
M5*	5						2.03	●**SS1.5-95 J20**
M5*	5						2.02	●**SS1.5-95 J22**
M6	5						1.99	●**SS1.5-95 J25**
M6	5						1.97	●**SS1.5-95 J28**
M6	5						1.95	●**SS1.5-95 J30**
M8	5						1.93	●**SS1.5-95 J32**
M8	5						1.90	●**SS1.5-95 J35**
—	—	147	35.5	15.0	3.62	0.18~0.38	1.88	**SS1.5-100**
M4*	5						1.87	●**SS1.5-100 J15**
M4*	5						1.86	●**SS1.5-100 J16**
M5*	5						1.85	●**SS1.5-100 J18**
M5*	5						1.84	●**SS1.5-100 J19**
M5*	5						1.84	●**SS1.5-100 J20**
M5*	5						1.83	●**SS1.5-100 J22**
M6	5						1.80	●**SS1.5-100 J25**
M6	5						1.78	●**SS1.5-100 J28**
M6	5						1.76	●**SS1.5-100 J30**
M8	5						1.74	●**SS1.5-100 J32**
M8	5						1.71	●**SS1.5-100 J35**
—	—	180	52.3	18.4	5.33	0.18~0.38	2.74	**SS1.5-120**
M4*	5						2.72	●**SS1.5-120 J15**
M4*	5						2.72	●**SS1.5-120 J16**
M5*	5						2.71	●**SS1.5-120 J18**
M5*	5						2.70	●**SS1.5-120 J19**
M5*	5						2.70	●**SS1.5-120 J20**
M5*	5						2.69	●**SS1.5-120 J22**
M6*	5						2.66	●**SS1.5-120 J25**
M6*	5						2.64	●**SS1.5-120 J28**
M6	5						2.62	●**SS1.5-120 J30**
M8	5						2.60	●**SS1.5-120 J32**
M8	5						2.57	●**SS1.5-120 J35**
—	—	192	70.3	19.6	7.17	0.18~0.38	6.62	**SS1.5-150**
—	—	261	131	26.7	13.3	0.22~0.46	11.8	**SS1.5-200**

[Caution on J series]

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